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David Waddell
Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0500

Re: *Adelphia Business Solutions of Tennessee, LP and AVR, LP d/b/a Hyperion of Tennessee with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996*

Docket No. 00-00927

Dear David:

I have enclosed one original and thirteen copies of Direct Prefiled Testimony of Timothy J. Gates filed on behalf of Adelphia Business Solutions of Tennessee, LP and AVR LP, d/b/a Hyperion of Tennessee LP, Inc. in the above-captioned proceeding.

Very truly yours,

BOULT, CUMMINGS, CONNERS & BERRY, PLC



By:

Henry Walker *HW*

HW/nl
Enclosure
cc: Parties

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

Petition of)	
)	
ADELPHIA BUSINESS SOLUTIONS,)	
OF TENNESSEE, LP and AVR, L.P. d/b/a)	
HYPERION OF TENNESSEE, L.P., INC.)	Docket No. 00-00927
For Arbitration with BellSouth)	
Telecommunications, Inc. Pursuant to)	
Section 252(b) of the Communications)	
Act of 1934, as amended by the)	
Telecommunications Act of 1996)	

DIRECT PREFILED TESTIMONY
OF TIMOTHY J. GATES

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE**
2 **RECORD.**

3 A. My name is Timothy J. Gates. My business address is 15712 W. 72nd Circle,
4 Arvada, Colorado 80007.

5 **Q. BY WHOM ARE YOU EMPLOYED?**

6 A. I am employed by QSI Consulting, Inc. ("QSI").

7 **Q. PLEASE DESCRIBE QSI AND IDENTIFY YOUR POSITION WITH THE FIRM.**

8 A. QSI is a consulting firm specializing in the areas of telecommunications policy,
9 econometric analysis and computer aided modeling. I currently serve as Senior
10 Vice President.

11 **Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?**

12 A. This testimony was prepared on behalf of Adelphia Business Solutions of
13 Tennessee, LP ("Adelphia").

1 **Q. PLEASE DESCRIBE YOUR EXPERIENCE WITH TELECOMMUNICATIONS**
2 **POLICY ISSUES AND YOUR RELEVANT WORK HISTORY.**

3 A. Prior to joining QSI I was a Senior Executive Staff Member at MCI WorldCom,
4 Inc. ("MWCOM"). I was employed by MWCOM for 15 years in various public
5 policy positions. While at MWCOM I managed various functions, including
6 tariffing, economic and financial analysis, competitive analysis, witness training
7 and MWCOM's use of external consultants. I testified on behalf of MWCOM
8 more than 150 times in 32 states and before the FCC on various public policy
9 issues ranging from costing, pricing, local entry and universal service to strategic
10 planning, merger and network issues. Prior to joining MWCOM, I was employed
11 as a Telephone Rate Analyst in the Engineering Division at the Texas Public
12 Utility Commission and earlier as an Economic Analyst at the Oregon Public
13 Utility Commission. I also worked at the Bonneville Power Administration as a
14 Financial Analyst doing total electric use forecasts while I attended graduate
15 school. Prior to doing my graduate work, I worked for ten years as a forester in
16 the Pacific Northwest for multinational and government organizations. TJG
17 Schedule 1 to this testimony is a summary of my work experience and education.

18 **Q. YOU SAID YOU TESTIFIED IN NUMEROUS STATES. DID YOU EVER FILE**
19 **TESTIMONY IN TENNESSEE?**

20 A. No.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my testimony is to address Issue 2, "Definition of Local Traffic for
3 Purposes of the Parties' Reciprocal Compensation Obligations Under Section
4 251(b)(5) of the Act", identified in the Adelphia Petition for Approval of
5 Interconnection Agreement with BellSouth Telecommunications, Inc.
6 ("BellSouth") that was filed on October 18, 2000. I understand that the remaining
7 issues identified in Adelphia's Petition and BellSouth's Response, Issues 1, 3, 4,
8 5, and 6, have been settled by the parties.

9 **Q. PLEASE SUMMARIZE THE CONCLUSIONS YOU REACH IN YOUR**
10 **TESTIMONY.**

11 A. Adelphia, other competitive local exchange carriers ("CLECs"), and BellSouth
12 itself currently assign NXX codes to customers who are not physically located in
13 the exchange area associated with a particular NXX. These calls have been and
14 are currently treated as local calls. For example, BellSouth has offered "foreign
15 exchange service" ("FX") with this capability for many years. This practice has
16 many benefits to the public, including allowing consumers and small businesses,
17 especially those in isolated or rural areas of the state, efficient, reasonably priced
18 access to Internet service providers ("ISPs") and other businesses that otherwise
19 would be impossible if such calls were treated as toll calls or anything other than
20 local.

21 There is no economic, engineering, factual or policy basis for BellSouth's
22 proposal to make intercarrier compensation depend on the actual location of the

1 terminating carrier's customer. Indeed, from the standpoints of both cost and
2 functionality, the physical location of the terminating carrier's customer is
3 irrelevant. Historically, the telecommunications industry has compared NXX
4 codes to determine the appropriate treatment of calls as local or toll. Calls to a
5 given NXX code use the same path and the same equipment to reach the point
6 of interconnection ("POI") and the terminating carrier's switch regardless of the
7 location of the terminating customer. To single out a class of calls and to
8 suggest that no compensation should be paid for carrying those particular calls is
9 not equitable and ignores the simple economic and engineering reality that both
10 kinds of calls are functionally identical and should be subject to the same
11 intercarrier compensation framework that the parties have negotiated. Such
12 treatment would also be inconsistent with the overarching goals and objectives of
13 the Telecommunications Act, and would violate existing FCC rules and Orders.

14 BellSouth's proposal would increase the cost of Internet access and
15 reduce competition to the detriment of consumers, even though its own costs in
16 handling these calls are the same as for any other local call. The Commission
17 should deny BellSouth's attempt to exclude this, or any other type of local call
18 from the intercarrier compensation framework that the parties have negotiated,
19 and its attempt to apply switched access charges to ISP-bound and other kinds
20 of foreign or virtual NXX calls.

1 **ISSUE 2 – (A) SHOULD THE PARTIES BE OBLIGATED TO COMPENSATE**
2 **EACH OTHER FOR CALLS TO NUMBERS WITH NXX CODES ASSOCIATED**
3 **WITH THE SAME LOCAL CALLING AREA? (B) SHOULD BELL SOUTH BE**
4 **ABLE TO CHARGE ORIGINATING ACCESS TO ADELPHIA ON ALL CALLS**
5 **GOING TO A PARTICULAR NXX CODE BASED UPON THE LOCATION OF ANY**
6 **ONE CUSTOMER?**

7 **Q. PLEASE BRIEFLY DESCRIBE THE DISPUTE ON THIS POINT.**

8 A. There are really two issues in dispute under this single heading. First, BellSouth
9 is obligated to pay intercarrier compensation for all calls originated by BellSouth
10 customers to Adelphia line numbers with “NXX” codes associated with the calling
11 party’s local calling area. Calls are conventionally rated and routed throughout
12 the U.S. telephone industry based upon the NXX codes of the originating and
13 terminating numbers. There is no reason to deviate from this convention now.
14 These local calls are routed to the interconnection point or POI for local traffic
15 and handed off just as any other local call would be. This practice should be
16 continued such that calls between an originating and terminating NXX associated
17 with the same local calling area are rated and routed as local.

18 The second issue in dispute is whether BellSouth should be allowed to
19 impose per-minute originating switched access charges for carrying such calls to
20 the parties’ POI. As this Commission is well aware, according to FCC Rules and
21 Orders, access charges cannot be imposed on locally dialed calls, such as are at
22 issue here. Under any scenario, the only costs BellSouth incurs are the transport
23 and switching charges required to bring traffic to the interconnection point
24 between BellSouth and Adelphia. These costs do not change based upon the
25 location of Adelphia’s customers, so there is no economic justification for treating

1 these calls differently from any other locally dialed call. Further, it would be
2 inconsistent and anti-competitive to allow BellSouth to evade its intercarrier
3 compensation obligations and, at the same time, to charge Adelphia originating
4 switched access charges for calls going to a particular NXX code. Not only
5 would BellSouth double-recover for carrying such traffic (through local rates and
6 access charges), but it would be compensated for costs it does not even incur
7 and would be given a free ride on Adelphia's network. Each of the issues, when
8 considered individually would put new entrants such as Adelphia at an extreme
9 disadvantage in the marketplace if BellSouth were to prevail. Taken together,
10 the requirement to pay BellSouth access charges on local calls, and being
11 deprived the opportunity to recover any expenses for terminating calls for
12 BellSouth, would be a devastating blow to Adelphia in its bid to offer competitive
13 local exchange service in Tennessee.

14 **Q. WHAT IS BELL SOUTH'S POSITION ON THIS ISSUE?**

15 A. BellSouth argues for overturning the historical system I describe above,
16 complaining that it should not be required to pay intercarrier compensation even
17 though a call would be rated and billed to end-users as local by comparing the
18 NXX codes of the originating and terminating numbers. Further, BellSouth
19 argues that it should be able to charge originating access charges for all calls to
20 an NXX if a single customer with that NXX is physically located outside the local
21 calling area. BellSouth provides no evidence that such calls increase its costs as
22 compared to other local calls in any way such that additional or different cost

1 recovery is justified. BellSouth also fails to show that changing this historical
2 system as it suggests would provide any benefits to the public interest. In
3 contrast, maintaining the existing system will provide significant benefits to
4 consumers and would be consistent with the goal of increasing competitive
5 offerings for consumers in Tennessee.

6 **Q. BEFORE TURNING TO THE SUBSTANCE OF THE DISPUTE, WHAT ARE**
7 **NXX CODES?**

8 A. NXX codes are the fourth through sixth digits of a ten-digit telephone number.
9 For example, in the Tennessee Regulatory Authority's telephone number, (615)
10 741-2904, the NXX code is "741".

11 **Q. HOW ARE CUSTOMERS ASSIGNED AN NXX CODE?**

12 A. Carriers, like Adelphia and BellSouth, request and are assigned blocks of
13 telephone numbers by the numbering administrator. The carriers then assign
14 numbers to their customers as requested.

15 **Q. HOW IS THE RATING OF CALLS IMPACTED BY THE NUMBERS ASSIGNED**
16 **TO CUSTOMERS?**

17 A. Standard industry procedure provides that each NXX code is associated with a
18 particular rate center.¹ (A single rate center may have more than one NXX code,
19 but each code is assigned to one and only one rate center.) This uniquely
20 identifies the end office switch serving the NXX code, so that each carrier that is
21 routing a call knows which end office switch to send the call to. However, it is not

¹ A rate center is a geographic location with specific vertical and horizontal coordinates used for determining mileage, for rating local or toll calls.

1 uncommon for NXX codes to be assigned to customers who are not physically
2 located in the rate center where the NXX is "homed". When an incumbent local
3 exchange company ("ILEC") provides this arrangement, it typically is called
4 foreign exchange or FX service. This type of arrangement also may be referred
5 to as "Virtual NXX" because the customer assigned the telephone number has a
6 "virtual" presence in the calling area associated with that NXX. Calls to these
7 customers are still routed to the end office switch associated with the NXX code,
8 but then are routed within the terminating carrier's network to the called party's
9 actual physical location.

10 **Q. WHY WOULD CARRIERS OR THEIR CUSTOMERS WANT A VIRTUAL NXX**
11 **CODE?**

12 A. Customers want to use virtual NXX codes because it allows them to take
13 advantage of state-of-the-art, currently available technologies to allow consumers
14 to reach their businesses without having the disincentive of a toll call. It also
15 allows businesses and organizations to provide service in other areas before
16 they actually have facilities or offices in those areas. Absent such calling plans,
17 consumers would have to wait for carriers to build out their networks – which
18 could take years and millions of dollars. For instance, so-called virtual NXX
19 arrangements enable ISPs, among other customers, to offer local dial-up
20 numbers throughout Tennessee, including to more isolated, rural, areas of the
21 State. Access to the Internet is affordable and readily available in all areas of the
22 state because these NXX arrangements allow ISPs to establish a small number

1 of points of presence ("POPs") that can be reached by dialing a local number
2 regardless of the physical location of the Internet subscriber. Rural small
3 businesses especially benefit from low-cost Internet access and increasingly
4 depend on such access to remain competitive. Thus, taking advantage of state-
5 of-the-art technologies through virtual NXX arrangements allows affordable
6 Internet access, particularly in isolated and rural areas, not only benefits
7 Tennessee's consumers but also promotes economic development.

8 Other organizations, such as the Tennessee State government, may also
9 want to make use of virtual NXX arrangements to allow residents to contact state
10 agencies – which may actually reside in Nashville – without incurring the cost of
11 a toll call. Such an arrangement would allow the state to provide services in rural
12 areas without building or renting space in those localities and without relocating
13 employees.

14 Carriers use virtual NXX codes because they allow them to respond to
15 customer demand through the use of new and innovative services. In 1997 and
16 1998, there was considerable discussion about the benefits to be expected from
17 competition in the local exchange market. Some of the more important expected
18 benefits were that competition would drive competitors to develop and utilize
19 networks efficiently in order to gain competitive advantages, by allowing them to
20 serve customers at lower cost. BellSouth's proposal would constitute an artificial
21 impediment to this natural progression of a developing competitive market, and
22 would deny Tennessee residents the associated benefits.

1 **Q. IS THIS NXX CODE ISSUE SIMPLY AN ASPECT OF THE ISP**
2 **COMPENSATION ISSUE THAT HAS ALREADY BEEN SETTLED BY THE**
3 **PARTIES?**

4 A. No. Although many ISPs do use virtual NXX arrangements, these services are
5 also used by other businesses and organizations that want to maintain a local
6 telephone number in some community where they do not have a physical
7 presence. This issue therefore affects ordinary local voice telephone calls as
8 well as ISP traffic.

9 **Q. IS IT UNLAWFUL OR AGAINST ANY RULES FOR CLECS TO PROVIDE**
10 **VIRTUAL NXXS TO THEIR CUSTOMERS?**

11 A. No. The use of virtual NXX codes is not unlawful or in any other way improper.
12 BellSouth, itself, provides several virtual NXX services, such as FX service, to its
13 customers, including ISPs. Indeed, nobody complained about such uses of NXX
14 codes until CLECs had some success in attracting ISP customers and the ILECs
15 began looking for ways to avoid compensating them for serving and terminating
16 calls to ISPs. From what I understand, there is no dispute between the parties as
17 to whether codes can be used in this manner -- rather; the dispute is over how
18 the parties will compensate one another in exchanging such calls.

1 **Q. PLEASE DESCRIBE THE IMPACT OF BELL SOUTH'S PROPOSED**
2 **LANGUAGE WITH RESPECT TO THE CUSTOMER'S PHYSICAL LOCATION**
3 **IN MORE DETAIL.**

4 A. The language proposed by BellSouth would have at least three significant
5 negative impacts in Tennessee. First, if the Commission adopted BellSouth's
6 proposed language, BellSouth would be able to evade the intercarrier
7 compensation arrangement that it has negotiated with Adelphia for a particular
8 class of traffic. Second, and contrary to one of the fundamental goals of the
9 1996 Act, BellSouth's proposed language would have a negative impact on the
10 competitive deployment of affordable dial-up Internet services in Tennessee, and
11 on businesses that simply want an affordable way for their distant customers to
12 reach them. This negative impact would result from the increase in costs to both
13 consumers and providers under BellSouth's proposal. Finally, BellSouth's
14 proposed language would give BellSouth a competitive advantage over Adelphia
15 in the ISP market.

16 **Q. HOW WOULD BELL SOUTH EVADE ITS INTERCARRIER COMPENSATION**
17 **OBLIGATIONS TO ADELPHIA BY LIMITING COMPENSATION TO CALLS**
18 **TERMINATING TO A CUSTOMER WITH A PHYSICAL PRESENCE IN THE**
19 **SAME LOCAL CALLING AREA AS THE ORIGINATING CALLER?**

20 A. Deviating from the historical practice of rating a call based upon the NXX codes
21 of the originating and terminating number would give BellSouth the ability to
22 arbitrarily re-classify local calls as toll calls. This is because under BellSouth's

1 proposed language, it would be nearly impossible and much more economically
2 burdensome for Adelphia (or any other CLEC in a similar situation) to utilize
3 virtual NXXs in the provision of service to its customers.

4 As discussed above, Virtual NXXs are used by carriers to provide a local
5 number to customers in calling areas in which the customer is not physically
6 located. If the Commission adopts BellSouth's language and allows BellSouth to
7 avoid rating calls based on the NXX of the originating and terminating numbers,
8 calls to "virtual NXX" customers would effectively be reclassified as toll calls (at
9 least in the intercarrier environment, if not in the retail environment), and
10 BellSouth would no longer be obligated to compensate Adelphia for terminating
11 what for decades have been rated as simple local calls.

12 Indeed, BellSouth itself has always treated its FX service as local in nature
13 and has billed other carriers reciprocal compensation for calls terminating to
14 BellSouth FX customers.² Revenues from FX service are booked as local
15 revenues by BellSouth.³ I understand BellSouth may be changing this policy, in
16 a belated attempt to support its own efforts to have similar CLEC services treated
17 as toll in nature.

18 **Q. IN ADDITION TO COMPENSATION CONCERNS, YOU HAD MENTIONED**
19 **THAT BELL SOUTH PROPOSES TO CHARGE ORIGINATING ACCESS ON**
20 **EVERY "VIRTUAL NXX" CALL. DO THE COSTS INCURRED BY**

² See BellSouth Responses to Adelphia's First Set of Data Requests, Before the Tennessee Regulatory Authority in Docket 00-00927 (filed January 26, 2001) (response to data request No. 3) (copy attached as Exhibit TG-1).

BELLSOUTH IN ORIGINATING SUCH A CALL JUSTIFY THIS ADDITIONAL CHARGE?

A. No. First, as mentioned elsewhere in my testimony, LECs are not allowed to impose access charges upon local traffic. Nevertheless, and despite this specific prohibition, there is no additional cost incurred by BellSouth when a virtual NXX is provided to a CLEC customer, because BellSouth carries the call the same distance (to the POI) and incurs the same costs (in terms of local interconnection facilities used) regardless of the physical location of the “virtual NXX” customer. BellSouth’s obligations and costs are therefore the same in delivering a call originated by one of its customers, regardless of whether the call terminates at a so-called “virtual” or “physical” NXX behind the CLEC switch.

Q. DOES THE USE OF VIRTUAL NXX CODES IMPACT THE HANDLING OR PROCESSING OF A CALL TO AN ADELPHIA CUSTOMER?

A. No. BellSouth would always be responsible for carrying the call to the POI on its own network and then paying Adelphia to transport and terminate the call from that point. (Again, the POI is the physical interconnection between the two networks and represents the point where operational responsibility for handling local calls changes). The use of a virtual NXX does not impact BellSouth’s operational responsibilities such that it should be able to avoid compensating the terminating LEC or collect additional compensation. Indeed, Adelphia’s customer has a presence in the local calling area of the originating caller; it is a virtual

³ *Id.*

1 presence, not a physical one, but the way the call is handled is the same from
2 BellSouth's perspective.

3 **Q. EVEN IF ONE WERE TO OVERLOOK THE FACT THAT BELL SOUTH INCURS**
4 **NO ADDITIONAL COST IN ORIGINATING VIRTUAL NXX CALLS, DO YOU**
5 **THINK ACCESS CHARGES WOULD PROVIDE AN APPROPRIATE MEANS**
6 **OF COST RECOVERY FOR THIS TRAFFIC?**

7 A. Not at all. Setting aside the fact that intercarrier compensation for local traffic is
8 governed by the reciprocal compensation rules of the FCC,⁴ and that access
9 charges are imposed on traffic other than local traffic, access charges are not
10 cost-based, and it has been federal and state policy in recent years to drive
11 access charges down to forward-looking economic cost. It makes no sense to
12 impose an out-dated compensation regime on an artificial category of traffic. At a
13 time when regulators and the industry are looking to move to more competitive
14 market models by eliminating implicit subsidies in telecommunications rates and
15 intercarrier payments, it would seem contrary to that movement to suddenly foist
16 originating switched access charges on a certain type of local traffic. The costs
17 of originating this traffic do not differ from any other local call, and thus there is
18 absolutely no economic or policy justification for imposing switched access
19 charges on Adelphia for traffic originated by BellSouth customers.

⁴ FCC Rule 51.703(b) states, "A LEC may not assess charges on any other telecommunications carrier for local telecommunications traffic that originates on the LEC's network."

1 **Q. IS BELLSOUTH COMPENSATED FOR CARRYING THE TRAFFIC**
2 **ORIGINATED BY ITS CUSTOMERS TO THE ADELPHIA POI?**

3 A. Yes, it is. The FCC's *TSR Order* is directly on point. The pertinent language with
4 respect to BellSouth's compensation is as follows:

5 According to Defendants, the *Local Competition Order's* regulatory
6 regime, which requires carriers to pay for facilities used to deliver
7 their originating traffic to their co-carriers, represents a physical
8 occupation of Defendants property without just compensation, in
9 violation of the Takings Clause of the Constitution. We disagree.
10 The *Local Competition Order* requires a carrier to pay the cost of
11 facilities used to deliver traffic originated by that carrier to the
12 network of its co-carrier, who then terminates that traffic and bills
13 the originating carrier for termination compensation. In essence,
14 the originating carrier holds itself out as being capable of
15 transmitting a telephone call to any end user, and is responsible for
16 paying the cost of delivering the call to the network of the co-carrier
17 who will then terminate the call. Under the Commission's
18 regulations, the cost of the facilities used to deliver this traffic is the
19 originating carrier's responsibility, because these facilities are part
20 of the originating carrier's network. *The originating carrier recovers*
21 *the costs of these facilities through the rates it charges its own*
22 *customers for making calls.* This regime represents "rules of the
23 road" under which all carriers operate, and which make it possible
24 for one company's customer to call any other customer even if that
25 customer is served by another telephone company.⁵ (emphasis
26 added) (footnotes omitted)

27
28 By this reasoning, Adelphia should not have to pay BellSouth for BellSouth-
29 originated traffic from the local calling area to Adelphia's POI.

⁵ *TSR Wireless, LLC v. U S WEST Communications*, Memorandum Opinion and Order, ¶34 (June 21, 2000) (hereafter referred to as "TSR Order").

1 **Q. THIS QUOTE SAYS THAT BELL SOUTH WOULD RECOVER ITS COSTS**
2 **THROUGH THE RATES IT CHARGES ITS OWN CUSTOMERS. DO LOCAL**
3 **RATES COVER THE COST OF CARRYING THIS TRAFFIC TO THE POI?**

4 A. The FCC has clearly stated that BellSouth's rates cover these costs. Let me
5 point out, however, that in my opinion this reference is not just to the basic local
6 rates. Local revenues include not only the basic local rate, but other revenues
7 from subscriber line charges, vertical services (i.e., call waiting, call forwarding,
8 anonymous call rejection and other star code features), universal service
9 surcharges, extended area service charges and contribution from access
10 charges for intraLATA and interLATA toll.

11 **Q. IF BELL SOUTH IS ESSENTIALLY INDIFFERENT FROM A COST**
12 **PERSPECTIVE, WHY DO YOU SUPPOSE THAT THIS IS THE ONLY**
13 **REMAINING UNSETTLED ISSUE TO BE ARBITRATED IN THIS**
14 **PROCEEDING?**

15 A. I cannot speak for what motivates BellSouth to resist settlement on this issue.
16 However, I believe it is likely that BellSouth understands the importance of this
17 issue as it relates to new entrants' such as Adelphia's ability to compete.
18 Adelphia has been, and would likely continue to be successful in attracting new
19 customers in Tennessee. This success is often at the expense of BellSouth,
20 since many of the customers won by Adelphia were once served by BellSouth.
21 Therefore, although BellSouth incurs no additional costs through the virtual NXX
22 arrangement, I believe their concern has more to do with the opportunity costs

1 associated with losing a customer that Adelphia is able to serve through virtual
2 NXX. Total market dominance is a valuable asset, although it is not necessarily
3 in the public interest. It would make sense for BellSouth to protect and preserve
4 its monopoly by proposing language that would make it uneconomic for Adelphia
5 to chip away at its monopoly market share.⁶

6 As I have shown in this testimony, BellSouth's position is not supported on
7 economic, engineering, or public policy grounds. Adelphia's position is justified
8 in each of these categories. Although I can't say why BellSouth is resistant to
9 Adelphia's proposed language, it is not difficult to understand their reluctance to
10 settle this issue given their strong economic incentive to protect their monopoly
11 market share.

12 **Q. IT APPEARS THAT YOU HAVE PLACED SPECIAL EMPHASIS ON THE**
13 **NEGATIVE IMPACTS ON RURAL AREAS OF THE STATE ASSOCIATED**
14 **WITH THE ADOPTION OF BELL SOUTH'S POSITION. WHY WOULD RURAL**
15 **AREAS BE PARTICULARLY IMPACTED?**

16 **A.** One of the most significant advantages of incumbency is the ubiquitous network
17 of the ILEC. For the most part, this network was bought and paid for by
18 BellSouth customers over time, and BellSouth had rates approved that would
19 allow it to recover its costs of network deployment. Providers such as Adelphia
20 are in some cases, constrained from offering services on a widespread basis
21 because they do not have the advantage of having the ratepayer financed

⁶ According to the FCC's "Trends in Telephone Service" report issued in March of 2000, BellSouth's market share in Tennessee is over 97%.

1 ubiquitous network that BellSouth does. Therefore, market entry is often
2 confined to the more densely populated areas. The intercarrier compensation for
3 virtual NXX service as proposed by Adelphia in this arbitration would help to
4 equalize these inherent inequities, at least for some customers, by allowing
5 Adelphia to offer service state-wide, even to the more lightly populated areas of
6 Tennessee. Without this competitive equalization, Adelphia would only be able
7 to reach such areas at some point in the future, if at all, thereby denying rural
8 residents and businesses the benefits of competition.

9 These comments should not be construed as Adelphia asking for special
10 treatment because they are new competitors. Indeed, Adelphia's position,
11 supported by the economic and technical arguments I have put forth above,
12 would be just as compelling if Adelphia were an ILEC. I only raise the
13 competitive ramification issue here to illustrate the negative impact of adopting
14 BellSouth's proposed language.

15 **Q. HOW WOULD THE EFFICIENT DEPLOYMENT OF NETWORK FACILITIES IN**
16 **TENNESSEE BE IMPACTED IF BELL SOUTH'S PROPOSAL IS ADOPTED?**

17 A. The overarching goal of the Telecommunications Act is to promote competition in
18 the local exchange market. It is recognized that such competition would lead to,
19 among other things, the efficient deployment of network facilities. However,
20 adopting BellSouth's proposal may have the impact of leading to inefficient
21 network facilities deployment.

1 BellSouth's proposal makes entry into the Tennessee market more
2 expensive for carriers. Adelphia would have to reconsider providing local
3 services if BellSouth is allowed a free ride on Adelphia's network for terminating
4 calls. Even more egregious, is the additional cost of paying access charges on
5 calls originated by BellSouth's customers. This proposal provides absolutely no
6 incentive for CLECs to provide service in the state.

7 **Q. WOULD BELLSOUTH'S PROPOSAL ULTIMATELY VIOLATE THE**
8 **TELECOMMUNICATIONS ACT?**

9 A. Yes. Not only would the adoption of BellSouth's proposed language lead to
10 negative incentives for network facilities deployment, the proposal would be in
11 direct conflict with the 1996 Act, in that the Act calls for consumers in all regions
12 of the Nation, including those in rural, insular, and high cost areas, to have
13 access to telecommunications and information services at just, reasonable, and
14 comparable rates. (Sec. 254(b), 47 U.S.C. § 254(b)). Moreover, increasing the
15 cost of Internet access and other local calls provided through a virtual NXX,
16 through the introduction of access charges and the denial of intercarrier
17 compensation would be inconsistent with the Act's mandate for Internet services.
18 More specifically, Section 230(b)(2) (47 U.S.C. 230) of the Act states "It is the
19 policy of the United States to preserve the vibrant and competitive free market
20 that presently exists for the Internet and other interactive computer services,
21 unfettered by Federal or state regulation." To the extent BellSouth's proposal to

distinguish Internet usage and virtual NXX calls from other local usage increases the cost and depresses demand for Internet usage, it is not in the public interest.

Q. WOULD BELLSOUTH'S PROPOSED LANGUAGE GIVE IT A COMPETITIVE ADVANTAGE IN THE ISP MARKET?

A. Yes. BellSouth competes with new entrants like Adelphia. By precluding Adelphia from receiving intercarrier compensation for these services, and then imposing access charges on each call, BellSouth would create an economic barrier to other carriers providing local services, and would give itself a significant competitive advantage. This clear advantage for BellSouth would not only stifle the ability of CLECs such as Adelphia to provide service in Tennessee, but would essentially eliminate the prospect for competition in this market.

Q. IS THERE A SIMPLE WAY TO COMPARE THE POSITIONS OF THE PARTIES ON THIS ISSUE?

A. Yes. Let's look at the pros and cons of utilizing virtual NXX codes in Tennessee, and continuing to treat those calls as local. The pros are as follows, (1) provides CLEC customers with a local presence in additional local calling areas; (2) allows business expansion in the short-run while businesses build-out their facilities over time; (3) provides ISPs with a cost-effective way to provide local dial-up Internet service to customers throughout the state without having to have offices in every local calling area; (4) provides consumers, especially those in lightly populated areas, with efficient, low-cost dial-up access to the Internet; (5) treating these calls as local is consistent with the way BellSouth treats its FX service;

1 and, (6) this service provides a competitive alternative to the FX services
2 provided by BellSouth.

3 **Q. WHAT ARE THE NEGATIVE CONSEQUENCES OF PROVIDING VIRTUAL**
4 **NXX SERVICE IN TENNESSEE?**

5 A. I don't believe there are any negative consequences associated with providing
6 this service. BellSouth has not provided any evidence that these calls cost it any
7 more to deliver to Adelphia than other local calls. Further, BellSouth has not
8 shown that the use of virtual NXX codes is improper, illegal or in any way harmful
9 to the public interest. As such, there is no justification for denying Adelphia
10 intercarrier compensation for these calls and there is no justification for charging
11 originating access charges. It is undisputable that Adelphia is providing
12 BellSouth a service by terminating calls that are originated by BellSouth
13 customers.

14 BellSouth is complaining to the Commission because CLECs have been
15 successful in attracting customers with this service. BellSouth can compete for
16 these customers as well. The Commission should not allow BellSouth to use the
17 regulatory process to impede the development of competition in the local market.

18 **Q. ARE THERE NEGATIVE CONSEQUENCES OF ADOPTING BELL SOUTH'S**
19 **PROPOSED TREATMENT OF THESE CALLS?**

20 A. Yes. Denying intercarrier compensation and imposing access charges would
21 make it uneconomic for Adelphia to offer this service. As such, if Adelphia and
22 the ISP continued to serve areas currently served through virtual NXX

1 arrangements, the cost of Internet access would increase for consumers. ISPs
2 may likely decide not to use Adelphia and would likely use BellSouth's services –
3 thereby eliminating competition in this area of the local market. These results –
4 increased costs for consumers and eliminating competitive alternatives – are not
5 in the public interest.

6 **Q. PLEASE SUMMARIZE YOUR POSITION ON ISSUE 2.**

7 A. BellSouth should be required to compensate Adelphia for all calls to numbers
8 with NXX codes associated with the same local calling area. Because these
9 local calls are routed to the interconnection point for local traffic and handed off
10 just as any other local call, regardless of whether the called number has a
11 physical or virtual presence, such calls should continue to be rated and routed as
12 local. Allowing BellSouth to limit the compensation it pays to Adelphia to calls
13 terminated to a customer with a physical presence in the same local calling area
14 would allow BellSouth to evade the intercarrier compensation framework it has
15 negotiated with Adelphia, inhibit the provision of advanced services in Tennessee
16 and give BellSouth an anti-competitive advantage over Adelphia in the ISP
17 market.

18 There is no economic justification for BellSouth to treat calls differently
19 based on the physical location of Adelphia's customers. Because the physical
20 location of Adelphia's customer is irrelevant to the costs incurred by BellSouth,
21 BellSouth would not be justified in assessing originating charges for calls
22 terminated to certain customers with a virtual local presence. As I have

1 described, the impact of allowing BellSouth's proposed language would have
2 significant negative impacts on local competition and on consumers and small
3 businesses, particularly in rural areas of Tennessee.

4 If Adelphia is prohibited from receiving intercarrier compensation for virtual
5 NXX calls to prospective and current customers through BellSouth's proposed
6 contract restrictions, ISPs would either have to establish multiple POPs in order
7 to allow their subscribers to access the Internet via a local number, or to contract
8 with BellSouth and subscribe to BellSouth's ISP products. Because each POP
9 requires a significant investment in hardware, non-recurring charges and leased
10 line connections, and because provisioning services in new areas may cause
11 significant delays in ISP service offerings, the ability to offer ISP customers local
12 dial-up and single POP capability is a critical competitive consideration. More
13 importantly, forcing ISPs and Adelphia to deploy these facilities – when, as
14 described above, such deployment is not at all necessary – would encourage
15 inefficiency and a wasteful allocation of Adelphia's limited resources. Only
16 BellSouth, with its ubiquitous network of central offices developed with the
17 support of decades of subsidies, could likely offer ISPs the kind of presence
18 required in each local calling area to avoid the demonstrated need for virtual NXX
19 services.

20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

21 **A.** Yes, it does.

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

Petition of)	
)	
ADELPHIA BUSINESS SOLUTIONS,)	
OF TENNESSEE, LP and AVR, L.P. d/b/a)	
HYPERION OF TENNESSEE, L.P., INC.)	Docket No. 00-00927
For Arbitration with BellSouth)	
Telecommunications, Inc. Pursuant to)	
Section 252(b) of the Communications)	
Act of 1934, as amended by the)	
Telecommunications Act of 1996)	

DIRECT PREFILED TESTIMONY
OF TIMOTHY J. GATES

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Its Attorneys

Dated: January 31, 2001

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

Petition of)	
)	
ADELPHIA BUSINESS SOLUTIONS,)	
OF TENNESSEE, LP and AVR, L.P. d/b/a)	
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**DIRECT PREFILED TESTIMONY
OF TIMOTHY J. GATES**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE**
2 **RECORD.**

3 A. My name is Timothy J. Gates. My business address is 15712 W. 72nd Circle,
4 Arvada, Colorado 80007.

5 **Q. BY WHOM ARE YOU EMPLOYED?**

6 A. I am employed by QSI Consulting, Inc. ("QSI").

7 **Q. PLEASE DESCRIBE QSI AND IDENTIFY YOUR POSITION WITH THE FIRM.**

8 A. QSI is a consulting firm specializing in the areas of telecommunications policy,
9 econometric analysis and computer aided modeling. I currently serve as Senior
10 Vice President.

11 **Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?**

12 A. This testimony was prepared on behalf of Adelphia Business Solutions of
13 Tennessee, LP ("Adelphia").

1 **Q. PLEASE DESCRIBE YOUR EXPERIENCE WITH TELECOMMUNICATIONS**
2 **POLICY ISSUES AND YOUR RELEVANT WORK HISTORY.**

3 A. Prior to joining QSI I was a Senior Executive Staff Member at MCI WorldCom,
4 Inc. ("MWCOM"). I was employed by MWCOM for 15 years in various public
5 policy positions. While at MWCOM I managed various functions, including
6 tariffing, economic and financial analysis, competitive analysis, witness training
7 and MWCOM's use of external consultants. I testified on behalf of MWCOM
8 more than 150 times in 32 states and before the FCC on various public policy
9 issues ranging from costing, pricing, local entry and universal service to strategic
10 planning, merger and network issues. Prior to joining MWCOM, I was employed
11 as a Telephone Rate Analyst in the Engineering Division at the Texas Public
12 Utility Commission and earlier as an Economic Analyst at the Oregon Public
13 Utility Commission. I also worked at the Bonneville Power Administration as a
14 Financial Analyst doing total electric use forecasts while I attended graduate
15 school. Prior to doing my graduate work, I worked for ten years as a forester in
16 the Pacific Northwest for multinational and government organizations. TJG
17 Schedule 1 to this testimony is a summary of my work experience and education.

18 **Q. YOU SAID YOU TESTIFIED IN NUMEROUS STATES. DID YOU EVER FILE**
19 **TESTIMONY IN TENNESSEE?**

20 A. No.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my testimony is to address Issue 2, "Definition of Local Traffic for
3 Purposes of the Parties' Reciprocal Compensation Obligations Under Section
4 251(b)(5) of the Act", identified in the Adelphia Petition for Approval of
5 Interconnection Agreement with BellSouth Telecommunications, Inc.
6 ("BellSouth") that was filed on October 18, 2000. I understand that the remaining
7 issues identified in Adelphia's Petition and BellSouth's Response, Issues 1, 3, 4,
8 5, and 6, have been settled by the parties.

9 **Q. PLEASE SUMMARIZE THE CONCLUSIONS YOU REACH IN YOUR**
10 **TESTIMONY.**

11 A. Adelphia, other competitive local exchange carriers ("CLECs"), and BellSouth
12 itself currently assign NXX codes to customers who are not physically located in
13 the exchange area associated with a particular NXX. These calls have been and
14 are currently treated as local calls. For example, BellSouth has offered "foreign
15 exchange service" ("FX") with this capability for many years. This practice has
16 many benefits to the public, including allowing consumers and small businesses,
17 especially those in isolated or rural areas of the state, efficient, reasonably priced
18 access to Internet service providers ("ISPs") and other businesses that otherwise
19 would be impossible if such calls were treated as toll calls or anything other than
20 local.

21 There is no economic, engineering, factual or policy basis for BellSouth's
22 proposal to make intercarrier compensation depend on the actual location of the

1 terminating carrier's customer. Indeed, from the standpoints of both cost and
2 functionality, the physical location of the terminating carrier's customer is
3 irrelevant. Historically, the telecommunications industry has compared NXX
4 codes to determine the appropriate treatment of calls as local or toll. Calls to a
5 given NXX code use the same path and the same equipment to reach the point
6 of interconnection ("POI") and the terminating carrier's switch regardless of the
7 location of the terminating customer. To single out a class of calls and to
8 suggest that no compensation should be paid for carrying those particular calls is
9 not equitable and ignores the simple economic and engineering reality that both
10 kinds of calls are functionally identical and should be subject to the same
11 intercarrier compensation framework that the parties have negotiated. Such
12 treatment would also be inconsistent with the overarching goals and objectives of
13 the Telecommunications Act, and would violate existing FCC rules and Orders.

14 BellSouth's proposal would increase the cost of Internet access and
15 reduce competition to the detriment of consumers, even though its own costs in
16 handling these calls are the same as for any other local call. The Commission
17 should deny BellSouth's attempt to exclude this, or any other type of local call
18 from the intercarrier compensation framework that the parties have negotiated,
19 and its attempt to apply switched access charges to ISP-bound and other kinds
20 of foreign or virtual NXX calls.

1 **ISSUE 2 – (A) SHOULD THE PARTIES BE OBLIGATED TO COMPENSATE**
2 **EACH OTHER FOR CALLS TO NUMBERS WITH NXX CODES ASSOCIATED**
3 **WITH THE SAME LOCAL CALLING AREA? (B) SHOULD BELL SOUTH BE**
4 **ABLE TO CHARGE ORIGINATING ACCESS TO ADELPHIA ON ALL CALLS**
5 **GOING TO A PARTICULAR NXX CODE BASED UPON THE LOCATION OF ANY**
6 **ONE CUSTOMER?**

7 **Q. PLEASE BRIEFLY DESCRIBE THE DISPUTE ON THIS POINT.**

8 A. There are really two issues in dispute under this single heading. First, BellSouth
9 is obligated to pay intercarrier compensation for all calls originated by BellSouth
10 customers to Adelphia line numbers with “NXX” codes associated with the calling
11 party’s local calling area. Calls are conventionally rated and routed throughout
12 the U.S. telephone industry based upon the NXX codes of the originating and
13 terminating numbers. There is no reason to deviate from this convention now.
14 These local calls are routed to the interconnection point or POI for local traffic
15 and handed off just as any other local call would be. This practice should be
16 continued such that calls between an originating and terminating NXX associated
17 with the same local calling area are rated and routed as local.

18 The second issue in dispute is whether BellSouth should be allowed to
19 impose per-minute originating switched access charges for carrying such calls to
20 the parties’ POI. As this Commission is well aware, according to FCC Rules and
21 Orders, access charges cannot be imposed on locally dialed calls, such as are at
22 issue here. Under any scenario, the only costs BellSouth incurs are the transport
23 and switching charges required to bring traffic to the interconnection point
24 between BellSouth and Adelphia. These costs do not change based upon the
25 location of Adelphia’s customers, so there is no economic justification for treating

1 these calls differently from any other locally dialed call. Further, it would be
2 inconsistent and anti-competitive to allow BellSouth to evade its intercarrier
3 compensation obligations and, at the same time, to charge Adelphia originating
4 switched access charges for calls going to a particular NXX code. Not only
5 would BellSouth double-recover for carrying such traffic (through local rates and
6 access charges), but it would be compensated for costs it does not even incur
7 and would be given a free ride on Adelphia's network. Each of the issues, when
8 considered individually would put new entrants such as Adelphia at an extreme
9 disadvantage in the marketplace if BellSouth were to prevail. Taken together,
10 the requirement to pay BellSouth access charges on local calls, and being
11 deprived the opportunity to recover any expenses for terminating calls for
12 BellSouth, would be a devastating blow to Adelphia in its bid to offer competitive
13 local exchange service in Tennessee.

14 **Q. WHAT IS BELL SOUTH'S POSITION ON THIS ISSUE?**

15 A. BellSouth argues for overturning the historical system I describe above,
16 complaining that it should not be required to pay intercarrier compensation even
17 though a call would be rated and billed to end-users as local by comparing the
18 NXX codes of the originating and terminating numbers. Further, BellSouth
19 argues that it should be able to charge originating access charges for all calls to
20 an NXX if a single customer with that NXX is physically located outside the local
21 calling area. BellSouth provides no evidence that such calls increase its costs as
22 compared to other local calls in any way such that additional or different cost

1 recovery is justified. BellSouth also fails to show that changing this historical
2 system as it suggests would provide any benefits to the public interest. In
3 contrast, maintaining the existing system will provide significant benefits to
4 consumers and would be consistent with the goal of increasing competitive
5 offerings for consumers in Tennessee.

6 **Q. BEFORE TURNING TO THE SUBSTANCE OF THE DISPUTE, WHAT ARE**
7 **NXX CODES?**

8 A. NXX codes are the fourth through sixth digits of a ten-digit telephone number.
9 For example, in the Tennessee Regulatory Authority's telephone number, (615)
10 741-2904, the NXX code is "741".

11 **Q. HOW ARE CUSTOMERS ASSIGNED AN NXX CODE?**

12 A. Carriers, like Adelphia and BellSouth, request and are assigned blocks of
13 telephone numbers by the numbering administrator. The carriers then assign
14 numbers to their customers as requested.

15 **Q. HOW IS THE RATING OF CALLS IMPACTED BY THE NUMBERS ASSIGNED**
16 **TO CUSTOMERS?**

17 A. Standard industry procedure provides that each NXX code is associated with a
18 particular rate center.¹ (A single rate center may have more than one NXX code,
19 but each code is assigned to one and only one rate center.) This uniquely
20 identifies the end office switch serving the NXX code, so that each carrier that is
21 routing a call knows which end office switch to send the call to. However, it is not

¹ A rate center is a geographic location with specific vertical and horizontal coordinates used for determining mileage, for rating local or toll calls.

1 uncommon for NXX codes to be assigned to customers who are not physically
2 located in the rate center where the NXX is "homed". When an incumbent local
3 exchange company ("ILEC") provides this arrangement, it typically is called
4 foreign exchange or FX service. This type of arrangement also may be referred
5 to as "Virtual NXX" because the customer assigned the telephone number has a
6 "virtual" presence in the calling area associated with that NXX. Calls to these
7 customers are still routed to the end office switch associated with the NXX code,
8 but then are routed within the terminating carrier's network to the called party's
9 actual physical location.

10 **Q. WHY WOULD CARRIERS OR THEIR CUSTOMERS WANT A VIRTUAL NXX**
11 **CODE?**

12 A. Customers want to use virtual NXX codes because it allows them to take
13 advantage of state-of-the-art, currently available technologies to allow consumers
14 to reach their businesses without having the disincentive of a toll call. It also
15 allows businesses and organizations to provide service in other areas before
16 they actually have facilities or offices in those areas. Absent such calling plans,
17 consumers would have to wait for carriers to build out their networks – which
18 could take years and millions of dollars. For instance, so-called virtual NXX
19 arrangements enable ISPs, among other customers, to offer local dial-up
20 numbers throughout Tennessee, including to more isolated, rural, areas of the
21 State. Access to the Internet is affordable and readily available in all areas of the
22 state because these NXX arrangements allow ISPs to establish a small number

1 of points of presence ("POPs") that can be reached by dialing a local number
2 regardless of the physical location of the Internet subscriber. Rural small
3 businesses especially benefit from low-cost Internet access and increasingly
4 depend on such access to remain competitive. Thus, taking advantage of state-
5 of-the-art technologies through virtual NXX arrangements allows affordable
6 Internet access, particularly in isolated and rural areas, not only benefits
7 Tennessee's consumers but also promotes economic development.

8 Other organizations, such as the Tennessee State government, may also
9 want to make use of virtual NXX arrangements to allow residents to contact state
10 agencies – which may actually reside in Nashville – without incurring the cost of
11 a toll call. Such an arrangement would allow the state to provide services in rural
12 areas without building or renting space in those localities and without relocating
13 employees.

14 Carriers use virtual NXX codes because they allow them to respond to
15 customer demand through the use of new and innovative services. In 1997 and
16 1998, there was considerable discussion about the benefits to be expected from
17 competition in the local exchange market. Some of the more important expected
18 benefits were that competition would drive competitors to develop and utilize
19 networks efficiently in order to gain competitive advantages, by allowing them to
20 serve customers at lower cost. BellSouth's proposal would constitute an artificial
21 impediment to this natural progression of a developing competitive market, and
22 would deny Tennessee residents the associated benefits.

1 **Q. IS THIS NXX CODE ISSUE SIMPLY AN ASPECT OF THE ISP**
2 **COMPENSATION ISSUE THAT HAS ALREADY BEEN SETTLED BY THE**
3 **PARTIES?**

4 A. No. Although many ISPs do use virtual NXX arrangements, these services are
5 also used by other businesses and organizations that want to maintain a local
6 telephone number in some community where they do not have a physical
7 presence. This issue therefore affects ordinary local voice telephone calls as
8 well as ISP traffic.

9 **Q. IS IT UNLAWFUL OR AGAINST ANY RULES FOR CLECS TO PROVIDE**
10 **VIRTUAL NXXS TO THEIR CUSTOMERS?**

11 A. No. The use of virtual NXX codes is not unlawful or in any other way improper.
12 BellSouth, itself, provides several virtual NXX services, such as FX service, to its
13 customers, including ISPs. Indeed, nobody complained about such uses of NXX
14 codes until CLECs had some success in attracting ISP customers and the ILECs
15 began looking for ways to avoid compensating them for serving and terminating
16 calls to ISPs. From what I understand, there is no dispute between the parties as
17 to whether codes can be used in this manner -- rather; the dispute is over how
18 the parties will compensate one another in exchanging such calls.

1 **Q. PLEASE DESCRIBE THE IMPACT OF BELL SOUTH'S PROPOSED**
2 **LANGUAGE WITH RESPECT TO THE CUSTOMER'S PHYSICAL LOCATION**
3 **IN MORE DETAIL.**

4 A. The language proposed by BellSouth would have at least three significant
5 negative impacts in Tennessee. First, if the Commission adopted BellSouth's
6 proposed language, BellSouth would be able to evade the intercarrier
7 compensation arrangement that it has negotiated with Adelphia for a particular
8 class of traffic. Second, and contrary to one of the fundamental goals of the
9 1996 Act, BellSouth's proposed language would have a negative impact on the
10 competitive deployment of affordable dial-up Internet services in Tennessee, and
11 on businesses that simply want an affordable way for their distant customers to
12 reach them. This negative impact would result from the increase in costs to both
13 consumers and providers under BellSouth's proposal. Finally, BellSouth's
14 proposed language would give BellSouth a competitive advantage over Adelphia
15 in the ISP market.

16 **Q. HOW WOULD BELL SOUTH EVADE ITS INTERCARRIER COMPENSATION**
17 **OBLIGATIONS TO ADELPHIA BY LIMITING COMPENSATION TO CALLS**
18 **TERMINATING TO A CUSTOMER WITH A PHYSICAL PRESENCE IN THE**
19 **SAME LOCAL CALLING AREA AS THE ORIGINATING CALLER?**

20 A. Deviating from the historical practice of rating a call based upon the NXX codes
21 of the originating and terminating number would give BellSouth the ability to
22 arbitrarily re-classify local calls as toll calls. This is because under BellSouth's

1 proposed language, it would be nearly impossible and much more economically
2 burdensome for Adelphia (or any other CLEC in a similar situation) to utilize
3 virtual NXXs in the provision of service to its customers.

4 As discussed above, Virtual NXXs are used by carriers to provide a local
5 number to customers in calling areas in which the customer is not physically
6 located. If the Commission adopts BellSouth's language and allows BellSouth to
7 avoid rating calls based on the NXX of the originating and terminating numbers,
8 calls to "virtual NXX" customers would effectively be reclassified as toll calls (at
9 least in the intercarrier environment, if not in the retail environment), and
10 BellSouth would no longer be obligated to compensate Adelphia for terminating
11 what for decades have been rated as simple local calls.

12 Indeed, BellSouth itself has always treated its FX service as local in nature
13 and has billed other carriers reciprocal compensation for calls terminating to
14 BellSouth FX customers.² Revenues from FX service are booked as local
15 revenues by BellSouth.³ I understand BellSouth may be changing this policy, in
16 a belated attempt to support its own efforts to have similar CLEC services treated
17 as toll in nature.

18 **Q. IN ADDITION TO COMPENSATION CONCERNS, YOU HAD MENTIONED**
19 **THAT BELL SOUTH PROPOSES TO CHARGE ORIGINATING ACCESS ON**
20 **EVERY "VIRTUAL NXX" CALL. DO THE COSTS INCURRED BY**

² See BellSouth Responses to Adelphia's First Set of Data Requests, Before the Tennessee Regulatory Authority in Docket 00-00927 (filed January 26, 2001) (response to data request No. 3) (copy attached as Exhibit TG-1).

**BELLSOUTH IN ORIGINATING SUCH A CALL JUSTIFY THIS ADDITIONAL
CHARGE?**

A. No. First, as mentioned elsewhere in my testimony, LECs are not allowed to impose access charges upon local traffic. Nevertheless, and despite this specific prohibition, there is no additional cost incurred by BellSouth when a virtual NXX is provided to a CLEC customer, because BellSouth carries the call the same distance (to the POI) and incurs the same costs (in terms of local interconnection facilities used) regardless of the physical location of the “virtual NXX” customer. BellSouth’s obligations and costs are therefore the same in delivering a call originated by one of its customers, regardless of whether the call terminates at a so-called “virtual” or “physical” NXX behind the CLEC switch.

**Q. DOES THE USE OF VIRTUAL NXX CODES IMPACT THE HANDLING OR
PROCESSING OF A CALL TO AN ADELPHIA CUSTOMER?**

A. No. BellSouth would always be responsible for carrying the call to the POI on its own network and then paying Adelphia to transport and terminate the call from that point. (Again, the POI is the physical interconnection between the two networks and represents the point where operational responsibility for handling local calls changes). The use of a virtual NXX does not impact BellSouth’s operational responsibilities such that it should be able to avoid compensating the terminating LEC or collect additional compensation. Indeed, Adelphia’s customer has a presence in the local calling area of the originating caller; it is a virtual

³ *Id.*

1 presence, not a physical one, but the way the call is handled is the same from
2 BellSouth's perspective.

3 **Q. EVEN IF ONE WERE TO OVERLOOK THE FACT THAT BELL SOUTH INCURS**
4 **NO ADDITIONAL COST IN ORIGINATING VIRTUAL NXX CALLS, DO YOU**
5 **THINK ACCESS CHARGES WOULD PROVIDE AN APPROPRIATE MEANS**
6 **OF COST RECOVERY FOR THIS TRAFFIC?**

7 A. Not at all. Setting aside the fact that intercarrier compensation for local traffic is
8 governed by the reciprocal compensation rules of the FCC,⁴ and that access
9 charges are imposed on traffic other than local traffic, access charges are not
10 cost-based, and it has been federal and state policy in recent years to drive
11 access charges down to forward-looking economic cost. It makes no sense to
12 impose an out-dated compensation regime on an artificial category of traffic. At a
13 time when regulators and the industry are looking to move to more competitive
14 market models by eliminating implicit subsidies in telecommunications rates and
15 intercarrier payments, it would seem contrary to that movement to suddenly foist
16 originating switched access charges on a certain type of local traffic. The costs
17 of originating this traffic do not differ from any other local call, and thus there is
18 absolutely no economic or policy justification for imposing switched access
19 charges on Adelphia for traffic originated by BellSouth customers.

⁴ FCC Rule 51.703(b) states, "A LEC may not assess charges on any other telecommunications carrier for local telecommunications traffic that originates on the LEC's network."

1 Q. IS BELLSOUTH COMPENSATED FOR CARRYING THE TRAFFIC
2 ORIGINATED BY ITS CUSTOMERS TO THE ADELPHIA POI?

3 A. Yes, it is. The FCC's *TSR Order* is directly on point. The pertinent language with
4 respect to BellSouth's compensation is as follows:

5 According to Defendants, the *Local Competition Order's* regulatory
6 regime, which requires carriers to pay for facilities used to deliver
7 their originating traffic to their co-carriers, represents a physical
8 occupation of Defendants property without just compensation, in
9 violation of the Takings Clause of the Constitution. We disagree.
10 The *Local Competition Order* requires a carrier to pay the cost of
11 facilities used to deliver traffic originated by that carrier to the
12 network of its co-carrier, who then terminates that traffic and bills
13 the originating carrier for termination compensation. In essence,
14 the originating carrier holds itself out as being capable of
15 transmitting a telephone call to any end user, and is responsible for
16 paying the cost of delivering the call to the network of the co-carrier
17 who will then terminate the call. Under the Commission's
18 regulations, the cost of the facilities used to deliver this traffic is the
19 originating carrier's responsibility, because these facilities are part
20 of the originating carrier's network. *The originating carrier recovers*
21 *the costs of these facilities through the rates it charges its own*
22 *customers for making calls.* This regime represents "rules of the
23 road" under which all carriers operate, and which make it possible
24 for one company's customer to call any other customer even if that
25 customer is served by another telephone company.⁵ (emphasis
26 added) (footnotes omitted)

27
28 By this reasoning, Adelphia should not have to pay BellSouth for BellSouth-
29 originated traffic from the local calling area to Adelphia's POI.

⁵ *TSR Wireless, LLC v. U S WEST Communications*, Memorandum Opinion and Order, ¶34 (June 21, 2000) (hereafter referred to as "TSR Order").

1 **Q. THIS QUOTE SAYS THAT BELL SOUTH WOULD RECOVER ITS COSTS**
2 **THROUGH THE RATES IT CHARGES ITS OWN CUSTOMERS. DO LOCAL**
3 **RATES COVER THE COST OF CARRYING THIS TRAFFIC TO THE POI?**

4 A. The FCC has clearly stated that BellSouth's rates cover these costs. Let me
5 point out, however, that in my opinion this reference is not just to the basic local
6 rates. Local revenues include not only the basic local rate, but other revenues
7 from subscriber line charges, vertical services (i.e., call waiting, call forwarding,
8 anonymous call rejection and other star code features), universal service
9 surcharges, extended area service charges and contribution from access
10 charges for intraLATA and interLATA toll.

11 **Q. IF BELL SOUTH IS ESSENTIALLY INDIFFERENT FROM A COST**
12 **PERSPECTIVE, WHY DO YOU SUPPOSE THAT THIS IS THE ONLY**
13 **REMAINING UNSETTLED ISSUE TO BE ARBITRATED IN THIS**
14 **PROCEEDING?**

15 A. I cannot speak for what motivates BellSouth to resist settlement on this issue.
16 However, I believe it is likely that BellSouth understands the importance of this
17 issue as it relates to new entrants' such as Adelphia's ability to compete.
18 Adelphia has been, and would likely continue to be successful in attracting new
19 customers in Tennessee. This success is often at the expense of BellSouth,
20 since many of the customers won by Adelphia were once served by BellSouth.
21 Therefore, although BellSouth incurs no additional costs through the virtual NXX
22 arrangement, I believe their concern has more to do with the opportunity costs

1 associated with losing a customer that Adelphia is able to serve through virtual
2 NXX. Total market dominance is a valuable asset, although it is not necessarily
3 in the public interest. It would make sense for BellSouth to protect and preserve
4 its monopoly by proposing language that would make it uneconomic for Adelphia
5 to chip away at its monopoly market share.⁶

6 As I have shown in this testimony, BellSouth's position is not supported on
7 economic, engineering, or public policy grounds. Adelphia's position is justified
8 in each of these categories. Although I can't say why BellSouth is resistant to
9 Adelphia's proposed language, it is not difficult to understand their reluctance to
10 settle this issue given their strong economic incentive to protect their monopoly
11 market share.

12 **Q. IT APPEARS THAT YOU HAVE PLACED SPECIAL EMPHASIS ON THE**
13 **NEGATIVE IMPACTS ON RURAL AREAS OF THE STATE ASSOCIATED**
14 **WITH THE ADOPTION OF BELL SOUTH'S POSITION. WHY WOULD RURAL**
15 **AREAS BE PARTICULARLY IMPACTED?**

16 **A.** One of the most significant advantages of incumbency is the ubiquitous network
17 of the ILEC. For the most part, this network was bought and paid for by
18 BellSouth customers over time, and BellSouth had rates approved that would
19 allow it to recover its costs of network deployment. Providers such as Adelphia
20 are in some cases, constrained from offering services on a widespread basis
21 because they do not have the advantage of having the ratepayer financed

⁶ According to the FCC's "Trends in Telephone Service" report issued in March of 2000, BellSouth's market share in Tennessee is over 97%.

1 ubiquitous network that BellSouth does. Therefore, market entry is often
2 confined to the more densely populated areas. The intercarrier compensation for
3 virtual NXX service as proposed by Adelphia in this arbitration would help to
4 equalize these inherent inequities, at least for some customers, by allowing
5 Adelphia to offer service state-wide, even to the more lightly populated areas of
6 Tennessee. Without this competitive equalization, Adelphia would only be able
7 to reach such areas at some point in the future, if at all, thereby denying rural
8 residents and businesses the benefits of competition.

9 These comments should not be construed as Adelphia asking for special
10 treatment because they are new competitors. Indeed, Adelphia's position,
11 supported by the economic and technical arguments I have put forth above,
12 would be just as compelling if Adelphia were an ILEC. I only raise the
13 competitive ramification issue here to illustrate the negative impact of adopting
14 BellSouth's proposed language.

15 **Q. HOW WOULD THE EFFICIENT DEPLOYMENT OF NETWORK FACILITIES IN**
16 **TENNESSEE BE IMPACTED IF BELL SOUTH'S PROPOSAL IS ADOPTED?**

17 A. The overarching goal of the Telecommunications Act is to promote competition in
18 the local exchange market. It is recognized that such competition would lead to,
19 among other things, the efficient deployment of network facilities. However,
20 adopting BellSouth's proposal may have the impact of leading to inefficient
21 network facilities deployment.

1 BellSouth's proposal makes entry into the Tennessee market more
2 expensive for carriers. Adelphia would have to reconsider providing local
3 services if BellSouth is allowed a free ride on Adelphia's network for terminating
4 calls. Even more egregious, is the additional cost of paying access charges on
5 calls originated by BellSouth's customers. This proposal provides absolutely no
6 incentive for CLECs to provide service in the state.

7 **Q. WOULD BELLSOUTH'S PROPOSAL ULTIMATELY VIOLATE THE**
8 **TELECOMMUNICATIONS ACT?**

9 A. Yes. Not only would the adoption of BellSouth's proposed language lead to
10 negative incentives for network facilities deployment, the proposal would be in
11 direct conflict with the 1996 Act, in that the Act calls for consumers in all regions
12 of the Nation, including those in rural, insular, and high cost areas, to have
13 access to telecommunications and information services at just, reasonable, and
14 comparable rates. (Sec. 254(b), 47 U.S.C. § 254(b)). Moreover, increasing the
15 cost of Internet access and other local calls provided through a virtual NXX,
16 through the introduction of access charges and the denial of intercarrier
17 compensation would be inconsistent with the Act's mandate for Internet services.
18 More specifically, Section 230(b)(2) (47 U.S.C. 230) of the Act states "It is the
19 policy of the United States to preserve the vibrant and competitive free market
20 that presently exists for the Internet and other interactive computer services,
21 unfettered by Federal or state regulation." To the extent BellSouth's proposal to

distinguish Internet usage and virtual NXX calls from other local usage increases the cost and depresses demand for Internet usage, it is not in the public interest.

Q. WOULD BELL SOUTH'S PROPOSED LANGUAGE GIVE IT A COMPETITIVE ADVANTAGE IN THE ISP MARKET?

A. Yes. BellSouth competes with new entrants like Adelphia. By precluding Adelphia from receiving intercarrier compensation for these services, and then imposing access charges on each call, BellSouth would create an economic barrier to other carriers providing local services, and would give itself a significant competitive advantage. This clear advantage for BellSouth would not only stifle the ability of CLECs such as Adelphia to provide service in Tennessee, but would essentially eliminate the prospect for competition in this market.

Q. IS THERE A SIMPLE WAY TO COMPARE THE POSITIONS OF THE PARTIES ON THIS ISSUE?

A. Yes. Let's look at the pros and cons of utilizing virtual NXX codes in Tennessee, and continuing to treat those calls as local. The pros are as follows, (1) provides CLEC customers with a local presence in additional local calling areas; (2) allows business expansion in the short-run while businesses build-out their facilities over time; (3) provides ISPs with a cost-effective way to provide local dial-up Internet service to customers throughout the state without having to have offices in every local calling area; (4) provides consumers, especially those in lightly populated areas, with efficient, low-cost dial-up access to the Internet; (5) treating these calls as local is consistent with the way BellSouth treats its FX service;

1 and, (6) this service provides a competitive alternative to the FX services
2 provided by BellSouth.

3 **Q. WHAT ARE THE NEGATIVE CONSEQUENCES OF PROVIDING VIRTUAL**
4 **NXX SERVICE IN TENNESSEE?**

5 A. I don't believe there are any negative consequences associated with providing
6 this service. BellSouth has not provided any evidence that these calls cost it any
7 more to deliver to Adelphia than other local calls. Further, BellSouth has not
8 shown that the use of virtual NXX codes is improper, illegal or in any way harmful
9 to the public interest. As such, there is no justification for denying Adelphia
10 intercarrier compensation for these calls and there is no justification for charging
11 originating access charges. It is undisputable that Adelphia is providing
12 BellSouth a service by terminating calls that are originated by BellSouth
13 customers.

14 BellSouth is complaining to the Commission because CLECs have been
15 successful in attracting customers with this service. BellSouth can compete for
16 these customers as well. The Commission should not allow BellSouth to use the
17 regulatory process to impede the development of competition in the local market.

18 **Q. ARE THERE NEGATIVE CONSEQUENCES OF ADOPTING BELL SOUTH'S**
19 **PROPOSED TREATMENT OF THESE CALLS?**

20 A. Yes. Denying intercarrier compensation and imposing access charges would
21 make it uneconomic for Adelphia to offer this service. As such, if Adelphia and
22 the ISP continued to serve areas currently served through virtual NXX

1 arrangements, the cost of Internet access would increase for consumers. ISPs
2 may likely decide not to use Adelphia and would likely use BellSouth's services –
3 thereby eliminating competition in this area of the local market. These results –
4 increased costs for consumers and eliminating competitive alternatives – are not
5 in the public interest.

6 **Q. PLEASE SUMMARIZE YOUR POSITION ON ISSUE 2.**

7 A. BellSouth should be required to compensate Adelphia for all calls to numbers
8 with NXX codes associated with the same local calling area. Because these
9 local calls are routed to the interconnection point for local traffic and handed off
10 just as any other local call, regardless of whether the called number has a
11 physical or virtual presence, such calls should continue to be rated and routed as
12 local. Allowing BellSouth to limit the compensation it pays to Adelphia to calls
13 terminated to a customer with a physical presence in the same local calling area
14 would allow BellSouth to evade the intercarrier compensation framework it has
15 negotiated with Adelphia, inhibit the provision of advanced services in Tennessee
16 and give BellSouth an anti-competitive advantage over Adelphia in the ISP
17 market.

18 There is no economic justification for BellSouth to treat calls differently
19 based on the physical location of Adelphia's customers. Because the physical
20 location of Adelphia's customer is irrelevant to the costs incurred by BellSouth,
21 BellSouth would not be justified in assessing originating charges for calls
22 terminated to certain customers with a virtual local presence. As I have

1 described, the impact of allowing BellSouth's proposed language would have
2 significant negative impacts on local competition and on consumers and small
3 businesses, particularly in rural areas of Tennessee.

4 If Adelphia is prohibited from receiving intercarrier compensation for virtual
5 NXX calls to prospective and current customers through BellSouth's proposed
6 contract restrictions, ISPs would either have to establish multiple POPs in order
7 to allow their subscribers to access the Internet via a local number, or to contract
8 with BellSouth and subscribe to BellSouth's ISP products. Because each POP
9 requires a significant investment in hardware, non-recurring charges and leased
10 line connections, and because provisioning services in new areas may cause
11 significant delays in ISP service offerings, the ability to offer ISP customers local
12 dial-up and single POP capability is a critical competitive consideration. More
13 importantly, forcing ISPs and Adelphia to deploy these facilities – when, as
14 described above, such deployment is not at all necessary – would encourage
15 inefficiency and a wasteful allocation of Adelphia's limited resources. Only
16 BellSouth, with its ubiquitous network of central offices developed with the
17 support of decades of subsidies, could likely offer ISPs the kind of presence
18 required in each local calling area to avoid the demonstrated need for virtual NXX
19 services.

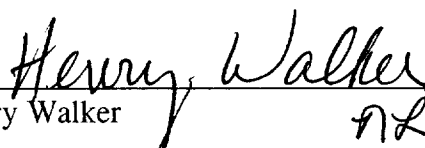
20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

21 **A.** Yes, it does.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been forwarded via U.S. Mail, postage prepaid, to the following on this the 31st day of January, 2001.

Guy Hicks, Esq.
BellSouth Telecommunications, Inc.
333 Commerce St., Suite 2101
Nashville, TN 37201-3300


Henry Walker *HL*

Attachment TG-1

REQUEST: Please explain how you rate each of the following types of traffic originated or terminated to your FX customers, and provide all documentation supporting your answer:

- a. A call placed by a BellSouth end user to a BellSouth FX customer where the NXX code of the dialed number is within the calling party's local calling area, but the FX customer is not physically located within that local calling area.
- b. A call placed by a BellSouth FX customer to a BellSouth end user where the dialed number is within the local calling area of the NXX code assigned to the FX customer, but the FX customer is not physically located in that local calling area.
- c. A call placed by a BellSouth end user to a BellSouth FX customer where the NXX code of the dialed number is within the same LATA as the calling party, but not within the same local calling area, and where the FX customer is physically located in the same local calling area as the calling party.
- d. A call placed by a BellSouth FX customer to a BellSouth end user where the dialed number is within the same LATA, but not within the same local calling area, as the NXX code assigned to the FX customer, and where the FX customer is physically located in the same local calling area as the called party.
- e. A call terminated by an interexchange carrier to a BellSouth FX customer.

RESPONSE: BellSouth objects to this request on the grounds that it is overly broad and that responding it would be unduly burdensome. Without waiving these objections, BellSouth provides the following responses.

- a. A call placed by a BellSouth end user to a BellSouth FX customer where the NXX code of the dialed number is within the calling party's local calling area, but the FX customer is not physically located within that local calling area, is rated and billed, for retail

RESPONSE: (continued)

purposes, as a local call. The rates the BellSouth end user pays for placing that call to the FX customer are booked as local revenue.

b. A call placed by a BellSouth FX customer to a BellSouth end user where the dialed number is within the local calling area of the NXX code assigned to the FX customer, but the FX customer is not physically located in that local calling area, is rated and billed, for retail purposes, as a local call. The rates the FX customer pays for local service are booked as local revenue.

c. A call placed by a BellSouth end user to a BellSouth FX customer where the NXX code of the dialed number is within the same LATA as the calling party, but not within the same local calling area, and where the FX customer is physically located in the same local calling area as the calling party, is rated and billed, for retail purposes, as a local call (which is booked as local revenue) or a toll call (which is booked as toll revenue) depending on the service subscribed to by the BellSouth end user placing the call. Most BellSouth customers with FX lines, however, also subscribe to one or more local service lines with NXX codes that are associated

RESPONSE: (continued)

with the local calling area in which the FX customer is physically located. It is more likely, therefore, that the BellSouth end user described in this subpart would call the FX customer on its local service line (as opposed to its FX line). In that case, the call would be rated and billed, for retail purposes, as a local call, and the rates for that call would be booked as local revenue.

- d. A call placed by a BellSouth FX customer to a BellSouth end user where the dialed number is within the same LATA, but not within the same local calling area, as the NXX code assigned to the FX customer, and where the FX customer is physically located in the same local calling area as the called party, is rated, for retail purposes, as a toll call. The rates for this call would be booked as toll revenue. Most BellSouth customers with FX lines, however, also subscribe to one or more local service lines with NXX codes that are associated with the local calling area in which the FX customer is physically located. It is more likely, therefore, that the FX customer described in this subpart would use its local service line (as opposed to its FX line) to call the BellSouth end user described in this subpart. In that case, the call would be rated and billed, for retail purposes, as a local call.
- e. A call terminated by an interexchange carrier to a BellSouth FX customer is rated and billed, for inter-carrier compensation purposes, as an access call. This revenue would be booked as network access revenue.

Attachment TG-2

Qualifications of Timothy J Gates
TJG Schedule 1

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

- A. Prior to my current position with QSI Consulting, I was a Senior Executive Staff Member in MCI WorldCom's ("MCIW") National Public Policy Group. In this position, I was responsible for providing public policy expertise in key cases across the country and for managing external consultants for MCIW's state public policy organization. In certain situations, I also provided testimony in regulatory and legislative proceedings.

Prior to my position with MCIW in Denver, I was an Executive Staff Member II at MCI Telecommunications ("MCI") World Headquarters in Washington D.C.. In that position I managed economists, external consultants, and provided training and policy support for regional regulatory staffs. Prior to that position I was a Senior Manager in MCI's Regulatory Analysis Department, which provided support in state regulatory and legislative matters to the various operating regions of MCI. In that position I was given responsibility for assigning resources from our group for state regulatory proceedings throughout the United States. At the same time, I prepared and presented testimony on various telecommunications issues before state regulatory and legislative bodies. I was also responsible for managing federal tariff reviews and presenting MCI's position on regulatory matters to the Federal Communications Commission. Prior to my assignment in the Regulatory Analysis Department, I was the Senior Manager of Economic Analysis and Regulatory Policy in the Legal, Regulatory and Legislative Affairs Department for the Midwest Division of MCI. In that position I developed and promoted regulatory policy within what was then a five-state operating division of MCI. I promoted MCI policy positions through negotiations, testimony and participation in industry forums.

Prior to my positions in the Midwest, I was employed as Manager of Tariffs and Economic Analysis with MCI's West Division in Denver, Colorado. In that position I was responsible for managing the development and application of MCI's tariffs in the fifteen MCI West states. I was also responsible for managing regulatory dockets and for providing economic and financial expertise in the areas of discovery and issue analysis. Prior to joining the West Division, I was a Financial Analyst III and then a Senior Staff Specialist with MCI's Southwest Division in Austin, Texas. In those positions, I was responsible for the management of regulatory dockets and liaison with outside counsel. I was also responsible for discovery, issue analysis, and for the development of working relationships with consumer and business groups. Just prior to joining MCI, I was employed by the Texas Public Utility Commission as a Telephone Rate Analyst in the Engineering Division responsible for examining telecommunications cost studies and rate structures.

I was employed as an Economic Analyst with the Public Utility Commissioner of Oregon from July, 1983 to December, 1984. In that position, I examined and analyzed cost studies and rate structures in telecommunications rate cases and investigations. I also testified in rate cases and in private and public hearings regarding telecommunications services. Before joining the Oregon Commissioner's Staff, I was employed by the Bonneville Power Administration as a Financial Analyst, where I made total regional electric use forecasts and automated the Average System Cost Review Methodology. Prior to joining the Bonneville Power Administration, I held numerous positions of increasing responsibility in areas of forest management for both public and private forestry concerns.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL CREDENTIALS.

- A. I received a Bachelor of Science degree from Oregon State University and a Master of Management degree in Finance and Quantitative Methods from Willamette University's Atkinson Graduate School of Management. I have also attended numerous courses and seminars specific to the telecommunications industry, including the NARUC Annual Regulatory Studies Program.

Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?

- A. Effective April 1, 2000, I joined QSI Consulting as Senior Vice President and Partner. In this position I provide analysis and testimony for QSI's many clients. The deliverables include written and oral testimony, analysis of rates, cost studies and policy positions, position papers, presentations on industry issues and training.

Q. PLEASE IDENTIFY THE JURISDICTIONS IN WHICH YOU HAVE TESTIFIED.

- A. I have filed testimony or comments on telecommunications issues in Alabama, Arizona, California, Colorado, Delaware, Georgia, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Washington, West Virginia, Wisconsin and Wyoming. I have also filed comments with the FCC and made presentations to the Department of Justice.

I have testified or presented formal comments in the following proceedings and forums:

Alabama:

October 18, 2000; Docket No. 27867; Adelphia Business Solutions Arbitration with BellSouth Telecommunications; Direct Testimony on Behalf of Adelphia.

Arizona:

September 23, 1987; Arizona Corporation Commission Workshop on Special Access Services; Comments on Behalf of MCI.

August 21, 1996; Affidavit in Opposition to USWC Motion for Partial Summary Judgment; No. CV 95-14284, No. CV-96-03355, No. CV-96-03356, (consolidated); On Behalf of MCI.

October 24, 1997; Comments to the Universal Service Fund Working Group; Docket No. R-0000-97-137; On Behalf of MCI.

May 8, 1998; Comments to the Universal Service Fund Working Group; Docket No. R-0000-97-137; On Behalf of MCI.

November 9, 1998; Docket No. T-03175A-97-0251; Application of MCImetro Access Transmission Services, Inc. to Expand Its CCN to Provide IntraLATA Services and to Determine that Its IntraLATA Services are Competitive; Direct Testimony on Behalf of MCI WorldCom, Inc.

September 20, 1999; Docket No. T-00000B-97-238; USWC OSS Workshop; Comments on Behalf of MCI WorldCom, Inc.

California:

August 30, 1996; Application No. 96-08-068; MCI Petition for Arbitration with Pacific Bell; Direct Testimony on Behalf of MCI.

September 10, 1996; Application No. 96-09-012; MCI Petition for Arbitration with GTE California, Inc.; Direct Testimony on Behalf of MCI.

June 5, 2000; Petition of Level 3 Communications for Arbitration of an Interconnection Agreement with Pacific Bell Telephone Company; Direct Testimony on Behalf of Level (3) Communications, LLC.

Colorado:

December 1, 1986; Investigation and Suspension Docket No. 1720; Rate Case of Mountain States Telephone and Telegraph Company; Direct Testimony on Behalf of MCI.

October 26, 1988; Investigation and Suspension Docket No. 1766; Mountain States Telephone and Telegraph Company's Local Calling Access Plan; Direct Testimony on Behalf of MCI.

September 6, 1996; MCImetro Petition for Arbitration with U S WEST Communications, Inc.; Docket No. 96A-366T (consolidated); Direct Testimony on Behalf of MCI.

September 17, 1996; MCImetro Petition for Arbitration with U S WEST Communications, Inc.; Docket No. 96A-366T (consolidated); Rebuttal Testimony on Behalf of MCI.

September 26, 1996; Application of U S WEST Communications, Inc. To Modify Its Rate and Service Regulation Plan; Docket No. 90A-665T (consolidated); Direct Testimony on Behalf of MCI.

October 7, 1996; Application of U S WEST Communications, Inc. To Modify Its Rate and Service Regulation Plan; Docket No. 90A-665T (consolidated); Rebuttal Testimony on Behalf of MCI.

July 18, 1997; Complaint of MCI to Reduce USWC Access Charges to Economic Cost; Docket Nos. 97K-237T, 97F-175T (consolidated) and 97F-212T (consolidated); Direct Testimony on Behalf of MCI.

August 15, 1997; Complaint of MCI to Reduce USWC Access Charges to Economic Cost; Docket Nos. 97K-237T, 97F-175T (consolidated) and 97F-212T (consolidated); Rebuttal Testimony on Behalf of MCI.

March 10, 1998; Application of WorldCom, Inc. for Approval to Transfer Control of MCI to WorldCom, Inc.; Docket No. 97A-494T; Supplemental Direct Testimony on Behalf of MCI.

March 26, 1998; Application of WorldCom, Inc. for Approval to Transfer Control of MCI to WorldCom, Inc.; Docket No. 97A-494T; Rebuttal Testimony on Behalf of MCI.

May 8, 1998; Application of WorldCom, Inc. for Approval to Transfer Control of MCI to WorldCom, Inc.; Docket No. 97A-494T; Affidavit in Response to GTE.

November 4, 1998; Proposed Amendments to the Rules Prescribing IntraLATA Equal Access; Docket No. 98R-426T; Comments to the Commission on Behalf of MCI WorldCom and AT&T Communications of the Mountain States, Inc.

May 13, 1999; Proposed Amendments to the Rules on Local Calling Area Standards; Docket No. 99R-128T; Oral Comments before the Commissioners on Behalf of MCIW.

Delaware:

February 12, 1993; Diamond State Telephone Company's Application for a Rate Increase; Docket No. 92-47; Direct Testimony on Behalf of MCI.

Florida:

July 1, 1994; Investigation into IntraLATA Presubscription; Docket No. 930330-TP; Direct Testimony on Behalf of MCI.

October 5, 2000; Petition of Level 3 for Arbitration with BellSouth; Docket No. 000907-TP; Direct Testimony On Behalf of Level 3.

October 13, 2000; Petition of BellSouth for Arbitration with US LEC of Florida Inc.; Docket No. 000084-TP; Direct Testimony On Behalf of US LEC.

October 27, 2000; Petition of BellSouth for Arbitration with US LEC of Florida Inc.; Docket No. 000084-TP; Rebuttal Testimony On Behalf of US LEC.

November 1, 2000; Petition of Level 3 for Arbitration with BellSouth; Docket No. 000907-TP; Rebuttal Testimony On Behalf of Level 3.

Georgia:

December 6, 2000; Docket No. 12645-U; Petition of Level 3 for Arbitration with BellSouth; Direct Testimony on Behalf of Level 3.

December 20, 2000; Docket No. 12645-U; Petition of Level 3 for Arbitration with BellSouth; Rebuttal Testimony on Behalf of Level 3.

Idaho:

November 20, 1987; Case No. U_1150_1; Petition of MCI for a Certificate of Public Convenience and Necessity; Direct Testimony on Behalf of MCI.

March 17, 1988; Case No. U_1500_177; Investigation of the Universal Local Access Service Tariff; Direct Testimony on Behalf of MCI.

April 26, 1988; Case No. U_1500_177; Investigation of the Universal Local Access Service Tariff; Rebuttal Testimony on Behalf of MCI.

Illinois:

January 16, 1989; Docket No. 83_0142; Appropriate Methodology for Intrastate Access Charges; Rebuttal Testimony Regarding Toll Access Denial on Behalf of MCI.

February 16, 1989; Docket No. 83_0142; Appropriate Methodology for Intrastate Access Charges; Testimony Regarding ITC's Access Charge Proposal on Behalf of MCI.

May 3, 1989; Docket No. 89_0033; Illinois Bell Telephone Company's Rate Restructuring; Direct Testimony on Behalf of MCI.

July 14, 1989; Docket No. 89-0033; Illinois Bell Telephone Company's Rate Restructuring; Rebuttal Testimony on Behalf of MCI.

November 22, 1989; Docket No. 88-0091; IntraMSA Dialing Arrangements; Direct Testimony on Behalf of MCI.

February 9, 1990; Docket No. 88-0091; IntraMSA Dialing Arrangements; Rebuttal Testimony on Behalf of MCI.

November 19, 1990; Docket No. 83-0142; Industry presentation to the Commission re Docket No. 83-0142 and issues for next generic access docket; Comments re the Imputation Trial and Unitary Pricing/Building Blocks on Behalf of MCI.

July 29, 1991; Case No. 90-0425; Presentation to the Industry Regarding MCI's Position on Imputation.

November 18, 1993; Docket No. 93-0044; Complaint of MCI and LDDS re Illinois Bell Additional Aggregated Discount and Growth Incentive Discount Services; Direct Testimony on Behalf of MCI and LDDS.

January 10, 1994; Docket No. 93-0044; Complaint of MCI and LDDS re Illinois Bell Additional Aggregated Discount and Growth Incentive Discount Services; Rebuttal Testimony on Behalf of MCI and LDDS.

May 30, 2000; Docket No. 00-0332; Level 3 Petition for Arbitration to Establish and Interconnection Agreement with Illinois Bell Telephone Company; Direct Testimony on Behalf of Level (3) Communications, LLC.

July 11, 2000; Docket No. 00-0332; Level 3 Petition for Arbitration to Establish and Interconnection Agreement with Illinois Bell Telephone Company; Supplemental Verified Statement on Behalf of Level (3) Communications, LLC.

Indiana:

October 28, 1988; Cause No. 38561; Deregulation of Customer Specific Offerings of Indiana Telephone Companies; Direct Testimony on Behalf of MCI.

December 16, 1988; Cause No. 38561; Deregulation of Customer Specific Offerings of Indiana Telephone Companies; Direct Testimony on Behalf of MCI Regarding GTE.

April 14, 1989; Cause No. 38561; Deregulation of Customer Specific Offerings of Indiana Telephone Companies; Direct Testimony on Behalf of MCI Regarding Staff Reports.

June 21, 1989; Cause No. 37905; Intrastate Access Tariffs -- Parity with Federal Rates; Direct Testimony on Behalf of MCI.

June 29, 1989; Cause No. 38560; Reseller Complaint Regarding 1 + IntraLATA Calling; Direct Testimony on Behalf of MCI.

October 25, 1990; Cause No. 39032; MCI Request for IntraLATA Authority; Direct Testimony on Behalf of MCI.

April 4, 1991; Rebuttal Testimony in Cause No. 39032 re MCI's Request for IntraLATA Authority on Behalf of MCI.

Iowa:

September 1, 1988; Docket No. RPU 88_6; IntraLATA Competition in Iowa; Direct Testimony on Behalf of MCI.

September 20, 1988; Docket No. RPU_88_1; Regarding the Access Charges of Northwestern Bell Telephone Company; Direct Testimony on Behalf of MCI.

September 25, 1991; Docket No. RPU-91-4; Investigation of the Earnings of U S WEST Communications, Inc.; Direct Testimony on Behalf of MCI.

October 3, 1991; Docket No. NOI-90-1; Presentation on Imputation of Access Charges and the Other Costs of Providing Toll Services; On Behalf of MCI.

November 5, 1991; Docket No. RPU-91-4; Investigation of the Earnings of U S WEST Communications, Inc.; Rebuttal Testimony on Behalf of MCI.

December 23, 1991; Docket No. RPU-91-4; Investigation of the Earnings of US WEST Communications; Inc.; Supplemental Testimony on Behalf of MCI.

January 10, 1992; Docket No. RPU-91-4; Investigation of the Earnings of U S WEST Communications, Inc.; Rebuttal Testimony on Behalf of MCI.

January 20, 1992; Docket No. RPU-91-4; Investigation of the Earnings of U S WEST Communications, Inc.; Surrebuttal Testimony on Behalf of MCI.

June 8, 1999; Docket NOI-99-1; Universal Service Workshop; Participated on numerous panels during two day workshop; Comments on Behalf of MCIW.

October 27, 1999; Docket NOI-99-1; Universal Service Workshop; Responded to questions posed by the Staff of the Board during one day workshop; Comments on Behalf of MCIW and AT&T.

Kansas:

June 10, 1992; Docket No. 181,097-U; General Investigation into IntraLATA Competition within the State of Kansas; Direct Testimony on Behalf of MCI.

September 16, 1992; Docket No. 181,097-U; General Investigation into IntraLATA Competition within the State of Kansas; Rebuttal Testimony on Behalf of MCI.

Kentucky:

May 20, 1993; Administrative Case No. 323, Phase I; An Inquiry into IntraLATA Toll Competition, an Appropriate Compensation Scheme for Completion of IntraLATA Calls by Interexchange Carriers, and WATS Jurisdictionality; Direct Testimony on Behalf of MCI.

Maryland:

November 12, 1993; Case No. 8585; Competitive Safeguards Required re C&P's Centrex Extend Service; Direct Testimony on Behalf of MCI.

January 14, 1994; Case No. 8585; Competitive Safeguards Required re C&P's Centrex Extend Service; Rebuttal Testimony on Behalf of MCI.

May 19, 1994; Case No. 8585; Re Bell Atlantic Maryland, Inc.'s Transmittal No. 878; Testimony on Behalf of MCI.

June 2, 1994; Case No. 8585; Competitive Safeguards Required re C&P's Centrex Extend Service; Rebuttal Testimony on Behalf of MCI.

Massachusetts:

April 22, 1993; D.P.U. 93-45; New England Telephone Implementation of Interchangeable NPAs; Direct Testimony on Behalf of MCI.

May 10, 1993; D.P.U. 93-45; New England Telephone Implementation of Interchangeable NPAs; Rebuttal Testimony on Behalf of MCI.

Michigan:

September 29, 1988; Case Nos. U_9004, U_9006, U_9007 (Consolidated); Industry Framework for IntraLATA Toll Competition; Direct Testimony on Behalf of MCI.

November 30, 1988; Case Nos. U_9004, U_9006, U_9007 (Consolidated); Industry Framework for IntraLATA Toll Competition; Rebuttal Testimony on Behalf of MCI.

June 30, 1989; Case No. U-8987; Michigan Bell Telephone Company Incentive Regulation Plan; Direct Testimony on Behalf of MCI.

July 31, 1992; Case No. U-10138; MCI v Michigan Bell and GTE re IntraLATA Equal Access; Direct Testimony on Behalf of MCI.

November 17, 1992; Case No. U-10138; MCI v Michigan Bell and GTE re IntraLATA Equal Access; Rebuttal Testimony on Behalf of MCI.

July 22, 1993; Case No. U-10138 (Reopener); MCI v Michigan Bell and GTE re IntraLATA Equal Access; Direct Testimony on Behalf of MCI.

February 16, 2000; Case No. U-12321; AT&T Communications of Michigan, Inc. Complainant v. GTE North Inc. and Contel of the South, Inc., d/b/a GTE Systems of Michigan; Direct Testimony on Behalf of AT&T. (Adopted Testimony of Michael Starkey)

May 11, 2000; Case No. U-12321; AT&T Communications of Michigan, Inc. Complainant v. GTE North Inc. and Contel of the South, Inc., d/b/a GTE Systems of Michigan; Rebuttal Testimony on Behalf of AT&T.

June 8, 2000; Case No. U-12460; Petition of Level 3 Communications for Arbitration to Establish an Interconnection Agreement with Ameritech Michigan; Direct Testimony on Behalf of Level (3) Communications, LLC.

September 27, 2000; Case No. U-12528; In the Matter of the Implementation of the Local Calling Area Provisions of the MTA; Rebuttal Testimony on Behalf of Focal Communications, Inc..

Minnesota:

January 30, 1987; Docket No. P_421/CI_86_88; Summary Investigation into Alternative Methods for Recovery of Non-traffic Sensitive Costs; Comments to the Commission on Behalf of MCI.

September 7, 1993; Docket No. P-999/CI-85-582, P-999/CI-87-697 and P-999/CI-87-695, In the Matter of an Investigation into IntraLATA Equal Access and Presubscription; Comments of MCI on the Report of the Equal Access and Presubscription Study Committee on Behalf of MCI.

September 20, 1996; Petition for Arbitration with U S WEST Communications, Inc.; Docket No. P-442, 421/M-96-855; P-5321, 421/M-96-909; and P-3167, 421/M-96-729 (consolidated); Direct Testimony on Behalf of MCI.

September 30, 1996; Petition for Arbitration with U S WEST Communications, Inc.; Docket No. P-442, 421/M-96-855; P-5321, 421/M-96-909; and P-3167, 421/M-96-729 (consolidated); Rebuttal Testimony on Behalf of MCI.

September 14-16, 1999; USWC OSS Workshop; Comments on Behalf of MCI WorldCom, Inc. re OSS Issues.

September 28, 1999; Docket No. P-999/R-97-609; Universal Service Group; Comments on Behalf of MCI WorldCom, Inc. and AT&T Communications.

Montana:

May 1, 1987; Docket No. 86.12.67; Rate Case of AT&T Communications of the Mountain States, Inc.; Direct Testimony on Behalf of MCI.

September 12, 1988; Docket No. 88.1.2; Rate Case of Mountain States Telephone and Telegraph Company; Direct Testimony on Behalf of MCI.

May 12, 1998; Docket No. D97.10.191; Application of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc.; Rebuttal Testimony on Behalf of MCI.

June 1, 1998; Docket No. D97.10.191; Application of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc.; Amended Rebuttal Testimony on Behalf of MCI.

Nebraska:

November 6, 1986; Application No. C_627; Nebraska Telephone Association Access Charge Proceeding; Direct Testimony on Behalf of MCI.

March 31, 1988; Application No. C_749; Application of United Telephone Long Distance Company of the Midwest for a

Certificate of Public Convenience and Necessity; Direct Testimony on Behalf of MCI.

New Hampshire:

April 30, 1993; Docket DE 93-003; Investigation into New England Telephone's Proposal to Implement Seven Digit Dialing for Intrastate Toll Calls; Direct Testimony on Behalf of MCI.

New Jersey:

September 15, 1993; Docket No. TX93060259; Notice of Pre-Proposal re IntraLATA Competition; Comments in Response to the Board of Regulatory Commissioners on Behalf of MCI.

October 1, 1993; Docket No. TX93060259; Notice of Pre-Proposal re IntraLATA Competition; Reply Comments in Response to the Board of Regulatory Commissioners on Behalf of MCI.

April 7, 1994; Docket Nos. TX90050349, TE92111047, and TE93060211; Petitions of MCI, Sprint and AT&T for Authorization of IntraLATA Competition and Elimination of Compensation; Direct Testimony on Behalf of MCI.

April 25, 1994; Docket Nos. TX90050349, TE92111047, and TE93060211; Petitions of MCI, Sprint and AT&T for Authorization of IntraLATA Competition and Elimination of Compensation; Rebuttal Testimony on Behalf of MCI.

New Mexico:

September 28, 1987; Docket No. 87_61_TC; Application of MCI for a Certificate of Public Convenience and Necessity; Direct Testimony on Behalf of MCI.

August 30, 1996; Docket No. 95-572-TC; Petition of AT&T for IntraLATA Equal Access; Rebuttal Testimony on Behalf of MCI.

New York:

April 30, 1992; Case 28425; Comments of MCI Telecommunications Corporation on IntraLATA Presubscription.

June 8, 1992; Case 28425; Reply Comments of MCI Telecommunications Corporation on IntraLATA Presubscription.

North Carolina:

August 4, 2000; Docket No. P779 SUB4; Petition of Level (3) Communications, LLC for Arbitration with Bell South; Direct Testimony on Behalf of Level (3) Communications, LLC.

September 18, 2000; Docket No. P779 SUB4; Petition of Level (3) Communications, LLC for Arbitration with Bell South; Rebuttal Testimony on Behalf of Level (3) Communications, LLC.

October 18, 2000; Docket No. P-886, SUB 1; Petition of Adelpia Business Solutions or North Carolina, LP for Arbitration with BellSouth; Direct Testimony on Behalf of Adelpia.

December 8, 2000; Docket No. P-886, SUB 1; Petition of Adelpia Business Solutions or North Carolina, LP for Arbitration with BellSouth; Rebuttal Testimony on Behalf of Adelpia.

North Dakota:

June 24, 1991; Case No. PU-2320-90-183 (Implementation of SB 2320 -- Subsidy Investigation); Direct Testimony on Behalf of MCI.

October 24, 1991; Case No. PU-2320-90-183 (Implementation of SB 2320 -- Subsidy Investigation); Rebuttal Testimony on Behalf of MCI.

Oklahoma:

April 2, 1992; Cause No. 28713; Application of MCI for Additional CCN Authority to Provide IntraLATA Services; Direct Testimony on Behalf of MCI.

June 22, 1992; Cause No. 28713; Application of MCI for Additional CCN Authority to Provide IntraLATA Services; Rebuttal Testimony on Behalf of MCI.

Oregon:

October 27, 1983; Docket No. UT 9; Pacific Northwest Bell Telephone Company Business Measured Service; Direct Testimony on Behalf of the Public Utility Commissioner of Oregon.

April 23, 1984; Docket No. UT 17; Pacific Northwest Bell Telephone Company Business Measured Service; Direct Testimony on Behalf of the Public Utility Commissioner of Oregon.

May 7, 1984; Docket No. UT 17; Pacific Northwest Bell Telephone Company Business Measured Service; Rebuttal Testimony on Behalf of the Public Utility Commissioner of Oregon.

October 31, 1986; Docket No. AR 154; Administrative Rules Relating to the Universal Service Protection Plan; Rebuttal Testimony on Behalf of MCI.

September 6, 1996; Docket ARB3/ARB6; Petition of MCI for Arbitration with U S WEST Communications, Inc.; Direct Testimony on Behalf of MCI.

October 11, 1996; Docket No. ARB 9; Interconnection Contract Negotiations Between MCImetro and GTE; Direct Testimony on Behalf of MCI.

November 5, 1996; Docket No. ARB 9; Interconnection Contract Negotiations Between MCImetro and GTE; Rebuttal Testimony on Behalf of MCI.

Pennsylvania:

December 9, 1994; Docket No. I-00940034; Investigation Into IntraLATA Interconnection Arrangements (Presubscription); Direct Testimony on Behalf of MCI.

Rhode Island:

April 30, 1993; Docket No. 2089; Dialing Pattern Proposal Made by the New England Telephone Company; Direct Testimony on Behalf of MCI.

South Carolina:

Oct. ??, 2000; Docket No. 2000-0446-C; US LEC of South Carolina Inc. Arbitration with BellSouth Telecommunications; Direct Testimony on Behalf of US LEC.

November 22, 2000; Docket No. 2000-516-C; Adelphia Business Solutions of South Carolina, Inc. Arbitration with BellSouth Telecommunications; Direct Testimony on Behalf of Adelphia.

December 14, 2000; Docket No. 2000-516-C; Adelphia Business Solutions of South Carolina, Inc. Arbitration with BellSouth Telecommunications; Rebuttal Testimony on Behalf of Adelphia.

South Dakota:

November 11, 1987; Docket No. F_3652_12; Application of Northwestern Bell Telephone Company to Introduce Its Contract Toll Plan; Direct Testimony on Behalf of MCI.

Texas:

June 5, 2000; PUC Docket No. 22441; Petition of Level 3 for Arbitration with Southwestern Bell Telephone Company; Direct Testimony on Behalf of Level (3) Communications, LLC.

June 12, 2000; PUC Docket No. 22441; Petition of Level 3 for Arbitration with Southwestern Bell Telephone Company; Rebuttal Testimony on Behalf of Level (3) Communications, LLC.

Utah:

November 16, 1987; Case No. 87_049_05; Petition of the Mountain State Telephone and Telegraph Company for Exemption from Regulation of Various Transport Services; Direct Testimony on Behalf of MCI.

July 7, 1988; Case No. 83_999_11; Investigation of Access Charges for Intrastate InterLATA and IntraLATA Telephone Services; Direct Testimony on Behalf of MCI.

November 8, 1996; Docket No. 96-095-01; MCImetro Petition for Arbitration with USWC Pursuant to 47 U.S.C. Section 252; Direct Testimony on Behalf of MCI.

November 22, 1996; Docket No. 96-095-01; MCImetro Petition for Arbitration with USWC Pursuant to 47 U.S.C. Section 252; Rebuttal Testimony on Behalf of MCI.

September 3, 1997; Docket No. 97-049-08; USWC Rate Case; Surrebuttal Testimony on Behalf of MCI.

September 29, 1997; Docket No. 97-049-08; USWC Rate Case; Revised Direct Testimony on Behalf of MCI.

Washington:

September 27, 1988; Docket No. U_88_2052_P; Petition of Pacific Northwest Bell Telephone Company for Classification of Services as Competitive; Direct Testimony on Behalf of MCI.

October 11, 1996; Docket No. UT-960338; Petition of MCImetro for Arbitration with GTE Northwest, Inc., Pursuant to 47 U.S.C.252; Direct Testimony on Behalf of MCI.

November 20, 1996; Docket No. UT-960338; Petition of MCImetro for Arbitration with GTE Northwest, Inc., Pursuant to 47 U.S.C.252; Rebuttal Testimony on Behalf of MCI.

January 13, 1998; Docket No. UT-970325; Rulemaking Workshop re Access Charge Reform and the Cost of Universal Service; Comments and Presentation on Behalf of MCI.

West Virginia:

October 11, 1994; Case No. 94-0725-T-PC; Bell Atlantic - West Virginia Incentive Regulation Plan; Direct Testimony on Behalf of MCI.

June 18, 1998; Case No. 97-1338-T-PC; Petition of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc.; Rebuttal Testimony on Behalf of MCI.

Wisconsin:

October 31, 1988; Docket No. 05_TR_102; Investigation of Intrastate Access Costs, Settlements, and IntraLATA Access Charges; Direct Testimony on Behalf of MCI.

November 14, 1988; Docket No. 05_TR_102; Investigation of Intrastate Access Costs, Settlements, and IntraLATA Access Charges; Rebuttal Testimony on Behalf of MCI.

December 12, 1988; Docket No. 05_TI_116; In the Matter of Provision of Operator Services; Rebuttal Testimony on Behalf of MCI.

March 6, 1989; Docket No. 6720_TI_102; Review of Financial Data Filed by Wisconsin Bell, Inc.; Direct Testimony on Behalf of MCI.

May 1, 1989; Docket No. 05_NC_100; Amendment of MCI's CCN for Authority to Provide IntraLATA Dedicated Access Services; Direct Testimony on Behalf of MCI.

May 11, 1989; Docket No. 6720_TR_103; Investigation Into the Financial Data and Regulation of Wisconsin Bell, Inc.; Rebuttal Testimony on Behalf of MCI.

July 5, 1989; Docket No. 05-TI-112; Disconnection of Local and Toll Services for Nonpayment -- Part A; Direct Testimony on Behalf of MCI.

July 5, 1989; Docket No. 05-TI-112; Examination of Industry Wide Billing and Collection Practices -- Part B; Direct Testimony on Behalf of MCI.

July 12, 1989; Docket No. 05-TI-112; Rebuttal Testimony in Parts A and B on Behalf of MCI.

October 9, 1989; Docket No. 6720-TI-102; Review of the WBI Rate Moratorium; Direct Testimony on Behalf of MCI.

November 17, 1989; Docket No. 6720-TI-102; Review of the WBI Rate Moratorium; Rebuttal Testimony on Behalf of MCI.

December 1, 1989; Docket No. 05-TR-102; Investigation of Intrastate Access Costs, Settlements, and IntraLATA Access Charges; Direct Testimony on Behalf of MCI.

April 16, 1990; Docket No. 6720-TR-104; Wisconsin Bell Rate Case; Direct Testimony on Behalf of MCI.

October 1, 1990; Docket No. 2180-TR-102; GTE Rate Case and Request for Alternative Regulatory Plan; Direct Testimony on Behalf of MCI.

October 15, 1990; Docket No. 2180-TR-102; GTE Rate Case and Request for Alternative Regulatory Plan; Rebuttal Testimony on Behalf of MCI.

November 15, 1990; Docket No. 05-TR-103; Investigation of Intrastate Access Costs and Intrastate Access Charges; Direct Testimony on Behalf of MCI.

April 3, 1992; Docket No. 05-NC-102; Petition of MCI for IntraLATA 10XXX 1 + Authority; Direct Testimony on Behalf of MCI.

Wyoming:

June 17, 1987; Docket No. 9746 Sub 1; Application of MCI for a Certificate of Public Convenience and Necessity; Direct Testimony on Behalf of MCI.

May 19, 1997; Docket No. 72000-TC-97-99; In the Matter of Compliance with Federal Regulations of Payphones; Oral Testimony on Behalf of MCI.

Comments Submitted to the Federal Communications Commission and/or the Department of Justice

March 6, 1991; Ameritech Transmittal No. 518; Petition to Suspend and Investigate on Behalf of MCI re Proposed Rates for OPTINET 64 Kbps Service.

April 17, 1991; Ameritech Transmittal No. 526; Petition to Suspend and Investigate on Behalf of MCI re Proposed Flexible ANI Service.

August 30, 1991; Ameritech Transmittal No. 555; Petition to Suspend and Investigate on Behalf of MCI re Ameritech Directory Search Service.

September 30, 1991; Ameritech Transmittal No. 562; Petition to Suspend and Investigate on Behalf of MCI re Proposed Rates and Possible MFJ Violations Associated with Ameritech's OPTINET Reconfiguration Service (AORS).

October 15, 1991; CC Docket No. 91-215; Opposition to Direct Cases of Ameritech and United (Ameritech Transmittal No. 518; United Transmittal No. 273) on Behalf of MCI re the introduction of 64 Kbps Special Access Service.

November 27, 1991; Ameritech Transmittal No. 578; Petition to Suspend and Investigate on Behalf of MCI re Ameritech Directory Search Service.

September 4, 1992; Ameritech Transmittal No. 650; Petition to Suspend and Investigate on Behalf of MCI re Ameritech 64 Clear Channel Capability Service.

February 16, 1995; Presentation to FCC Staff on the Status of Intrastate Competition on Behalf of MCI.

November 9, 1999; Comments to FCC Staff of Common Carrier Bureau on the Status of OSS Testing in Arizona on Behalf of MCI WorldCom, Inc.

November 9, 1999; Comments to the Department of Justice (Task Force on Telecommunications) on the Status of OSS Testing in Arizona and the USWC Collaborative on Behalf of MCI WorldCom, Inc.

Presentations Before Legislative Bodies:

April 8, 1987; Minnesota; Senate File 677; Proposed Deregulation Legislation; Comments before the House Committee on Telecommunications.

October 30, 1989; Michigan; Presentation Before the Michigan House and Senate Staff Working Group on Telecommunications; "A First Look at Nebraska, Incentive Rates and Price Caps," Comments on Behalf of MCI.

May 16, 1990; Wisconsin; Comments Before the Wisconsin Assembly Utilities Committee Regarding the Wisconsin Bell Plan for Flexible Regulation, on Behalf of MCI.

March 20, 1991; Michigan; Presentation to the Michigan Senate Technology and Energy Committee re SB 124 on behalf of MCI.

May 15, 1991; Michigan; Presentation to the Michigan Senate Technology and Energy Commission and the House Public Utilities Committee re MCI's Building Blocks Proposal and SB 124/HB 4343.

March 8, 2000; Illinois; Presentation to the Environment & Energy Senate Committee re Emerging Technologies and Their Impact on Public Policy, on Behalf of MCI WorldCom, Inc.

Presentations Before Industry Groups -- Seminars:

May 17, 1989; Wisconsin Public Utility Institute -- Telecommunications Utilities and Regulation; May 15-18, 1989; Panel Presentation -- Interexchange Service Pricing Practices Under Price Cap Regulation; Comments on Behalf of MCI.

July 24, 1989; National Association of Regulatory Utility Commissioners -- Summer Committee Meeting, San Francisco, California. Panel Presentation -- Specific IntraLATA Market Concerns of Interexchange Carriers; Comments on Behalf of MCI.

May 16, 1990; Wisconsin Public Utility Institute -- Telecommunications Utilities and Regulation; May 14-18, 1990; Presentation on Alternative Forms of Regulation.

October 29, 1990; Illinois Telecommunications Sunset Review Forum; Two Panel Presentations: Discussion of the Illinois Commerce Commission's Decision in Docket No. 88-0091 for the Technology Working Group; and, Discussion of the Treatment of Competitive Services for the Rate of Return Regulation Working Group; Comments on Behalf of MCI.

May 16, 1991; Wisconsin Public Utility Institute -- Telecommunications Utilities and Regulation Course; May 13-16, 1991; Participated in IntraLATA Toll Competition Debate on Behalf of MCI.

November 19, 1991; TeleStrategies Conference -- "Local Exchange Competition: The \$70 Billion Opportunity." Presentation as part of a panel on "IntraLATA 1 + Presubscription" on Behalf of MCI.

July 9, 1992; North Dakota Association of Telephone Cooperatives Summer Conference, July 8-10, 1992. Panel presentations on "Equal Access in North Dakota: Implementation of PSC Mandate" and "Open Network Access in North Dakota" on Behalf of MCI.

December 2-3, 1992; TeleStrategies Conference -- "IntraLATA Toll Competition -- A Multi-Billion Dollar Market Opportunity." Presentations on the interexchange carriers' position on intraLATA dialing parity and presubscription and on technical considerations on behalf of MCI.

March 14-17, 1993; NARUC Introductory Regulatory Training Program; Panel Presentation on Competition in Telecommunications on Behalf of MCI.

May 13-14, 1993; TeleStrategies Conference -- "IntraLATA Toll Competition -- Gaining the Competitive Edge"; Presentation on Carriers and IntraLATA Toll Competition on Behalf of MCI.

May 23-26, 1994; The 12th Annual National Telecommunications Forecasting Conference; Represented IXC's in Special Town Meeting Segment Regarding the Convergence of CATV and Telecommunications and other Local Competition Issues.

March 14-15, 1995; "The LEC-IXC Conference"; Sponsored by Telecommunications Reports and Telco Competition Report; Panel on Redefining the IntraLATA Service Market -- Toll Competition, Extended Area Calling and Local Resale.

August 28-30, 1995; "Phone + Supershow '95"; Playing Fair: An Update on IntraLATA Equal Access; Panel Presentation.

August 29, 1995; "TDS Annual Regulatory Meeting"; Panel Presentation on Local Competition Issues.

December 13-14, 1995; "NECA/Century Access Conference"; Panel Presentation on Local Exchange Competition.

October 23, 1997; "Interpreting the FCC Rules of 1997"; The Annenberg School for Communication at the University of Southern California; Panel Presentation on Universal Service and Access Reform.